



## 1. Application details

### 1.1. Permit application details

Permit application No.: 4310/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: PMR Quarries Pty Ltd TA WA Limestone

### 1.3. Property details

Property: LOT 1 ON DIAGRAM 75124 (House No. 2350 WANNEROO 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:
6.7		Mechanical Removal	Extractive Industry

### 1.5. Decision on application

Decision on Permit Application: Refuse  
Decision Date: 4 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 998 which is described as 'Medium woodland; tuart' (Shepherd et al, 2001).	The proposal is to clear 6.7 hectares of native vegetation for the purpose of limestone extraction and a limestone batching plant.  The majority of the area under application is in an excellent (Keighery, 1994) condition and consists of four vegetation types; Limestone Closed Shrubland, Melaleuca Shrubland, Banksia Woodland and Tuart Woodland (Landform Research, 2011).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The condition of the vegetation under application was determined via a site inspection (DEC, 2011a).

## 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**

This application proposes to clear 6.7 hectares of native vegetation within Lot 1 Nowergup Road (Lot 1), Nowergup for the purpose of limestone extraction and a limestone batching plant.

Lot 1 has been divided by the construction of Nowergup Road. The northern portion of Lot 1 has subsequently been classified as Bush Forever (Site 383). Lot 1 is approximately 25ha, the Bush Forever site is approximately 10ha and the southern portion of lot 1 is approximately 15ha. The proposal to clear 6.7 hectares of native vegetation is therefore approximately 30 per cent of the property.

The southern portion of Lot 1 contains the area under application. Landform Research (2010) conducted a Vegetation and Flora Assessment over the application area in November 2006, May 2007 and November 2007.

Landform Research (2010) identified four community types within the application area: Limestone Closed Shrubland, Melaleuca Shrubland, Banksia Woodland and Tuart Woodland. The majority of the area under application is in an excellent (Keighery, 1994) condition (DEC, 2011a).

The Vegetation and Flora Assessment (Landform Research, 2010) identified a total 92 native taxa and 20 non native species. No rare or priority species were recorded during the survey. However, It is noted that the Vegetation and Flora Assessment was undertaken in May and November and therefore may have missed peak flowering season for a number of priority flora which have been identified in the local area (10km radius), including *Hibbertia spicata* subsp. *leptotheca*, *Conostylis pauciflora* subsp. *pauciflora* and *Conostylis bracteata*.

It is noted that four quadrats were surveyed. Given that four different community types were identified, DEC considers that four quadrats are not sufficient to adequately assess the vegetation present within the application area given that 2 were within Banksia woodland and one was in a site that had previously been disturbed.

Within the local area fourteen records of floristic community type; Northern Spearwood shrublands and woodlands (Priority 3), have been identified. Given the number of instances of this priority community in the local area and the vegetation present on site it is possible that the tuart woodland within the application area may align with this community.

Two occurrences of threatened ecological community 26a (Melaleuca huegelii - M. systema shrublands on limestone) have been identified within the southern portion of Lot 1 (Landform Research, 2010). This TEC has been mapped along the eastern edge of the property and in the south. The mapped TEC's have been excluded from the proposed clearing area however they may still be impacted by edge effects such as weed invasion. Accumulation of dust resulting from the end land use may have a physical affect on the functioning of these plant communities due to increased stress (DEC, 2011b).

Western Wildlife (2007) carried out a Level 1 fauna assessment over the application area and reported that 8 species of amphibian, 48 species of reptile, 94 species of bird and 22 species of mammal may occur within the application area. In addition it is stated that the area under application provides suitable habitat for the Carpet Python, Black-striped Snake, Black-tailed Monitor, Yellow-faced Whip Snake, Carnaby's cockatoo, Rainbow Bee-eater, Quenda, Brush Wallaby, Western False Pipistrelle, Honey Possum, Western Pygmy Possum, Bush Rat, Graceful Sunmoth, Cricket and Native Bee (Western Wildlife, 2007).

In March 2012 Western Wildlife conducted a Graceful Sunmoth survey over the application area and did not record any Graceful Sunmoths.

Considering the above the application area is considered to contain a high level of biodiversity. Therefore, the clearing as proposed is at variance to this principle.

#### Methodology

##### References:

CALM (2003)  
DEC (2011a)  
DEC (2011b)  
Hopkins et al. (1996)  
Keighery (1994)  
Landform Research (2010)  
Western Wildlife (2007)

##### GIS Database:

- Pre European Vegetation - DA 01/01  
- Perth Metropolitan Area North 20cm Orthomosaic - Landgate 2007  
- SAC Biodatasets - accessed May 2011

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

#### Comments

##### **Proposal is at variance to this Principle**

Within the local area (10km radius) the following fauna listed as conservation significant under the Wildlife Conservation Act 1950 have been recorded (DEC, 2007-);

##### **Rare or likely to become extinct**

*Bettongia penicillata* subsp. *ogilbyi* (Brush-tailed Bettong, Woylie) (endangered under the Environment Protection and Biodiversity Conservation Act 1999 (Cwlth) (EPBC Act))  
*Botaurus poiciloptilus* (Australasian Bittern) (endangered under the EPBC Act)  
*Calyptorhynchus baudinii* (Baudin's cockatoo) (vulnerable under the EPBC Act)  
*Calyptorhynchus latirostris* (Carnaby's cockatoo) (endangered under the EPBC Act)  
*Dasyurus geoffroyi* (Western Quoll, Chuditch) (vulnerable under the EPBC Act)  
*Petrogale lateralis* subsp. *lateralis* (Black-footed Rock-wallaby) (vulnerable under the EPBC Act)  
*Synemon gratioiosa* (Graceful Sunmoth) (endangered under the EPBC Act)

##### **Other specially protected fauna**

*Falco peregrinus* (Peregrine Falcon)  
*Morelia spilota* subsp. *imbricata* (Carpet Python)

##### **Priority 3**

*Austrosaga spinifer* (cricket)  
*Hylaeus globuliferus* (bee)  
*Neelaps calonotos* (Black-striped Snake)

#### Priority 4

*Macropus irma* (Western Brush Wallaby)  
*Westralunio carteri*

#### Priority 5

*Isodon obesulus* subsp. *fusciventer* (Southern Brown Bandicoot, Quenda)

A level 1 fauna survey was undertaken by Western Wildlife on 31 August 2006. The report concluded that 'Lot 1 contains habitats which are generally in good condition and are likely to support a relatively intact community of native fauna species including; 8 species of amphibian, 48 species of reptile, 94 species of bird and 22 species of mammal' (Western Wildlife, 2007).

The Fauna Assessment states that the area under application provides suitable habitat for the Carpet Python, Black-striped Snake, Black-tailed Monitor, Yellow-faced Whip Snake, Carnaby's cockatoo, Rainbow Bee-eater, Quenda, Brush Wallaby, Western False Pipistrelle, Honey Possum, Western Pygmy Possum, Bush Rat, Graceful Sunmoth, Cricket and Native Bee (Western Wildlife, 2007).

Landform Research (2010) conducted Vegetation and Flora Assessments of Lot 1 on 30 November 2006, 28 May 2007, 5 November 2007 and 15 November 2007 and identified four community types; Limestone Closed Shrubland, Melaleuca Shrubland, Banksia Woodland and Tuart Woodland.

The vegetation within the application area comprises of various Banksia, Eucalyptus and Hakea species which are feed sources for Carnaby's cockatoo.

Carnaby's cockatoo is listed as endangered under the (Environment Protection and Biodiversity Conservation Act 1999), with populations declining dramatically due to land clearing for agriculture in regional areas and for urban development around Perth (Shah, 2006). Surveys of Carnaby's cockatoo 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). Clearing of feeding habitat on the Swan Coastal Plain poses a significant threat to the long term survival of Carnaby's cockatoo.

The local area (10km radius) surrounding Lot 1 contains 16 roosting sites for Carnaby's cockatoo with the closest site being located approximately 600 meters north on Gibbs Road.

The proposed clearing of 6.7 hectares will adversely impact on vegetation that is considered suitable foraging habitat for Carnaby's cockatoo.

Carnaby's cockatoo have been recorded breeding in the nearby Yanchep National Park. This species nest in the hollows of live or dead eucalypts trees. The application area contains tuarts of a suitable age and height to contain hollows suitable for nesting cockatoos (DEC, 2011a). The Fauna Assessment (Western Wildlife, 2007) did not observe any suitable hollows during the site inspection. It is noted that the Fauna Assessment did not record the presence of any potential habitat trees.

The Graceful Sunmoth is a small day-flying moth endemic to south-west Western Australia. This Sunmoth is considered to be threatened by land clearing for urban development (Burbidge, 2004) and is only currently known from a limited number of sites between Mandurah and Neerabup (Williams, 2008). *Lomandra maritima* is listed as a priority species for the Graceful Sunmoth and has been identified within Lot 1 (Landform Research, 2010).

In March 2012 Western Wildlife (2012) conducted a Graceful Sunmoth survey over the application area. The survey was conducted over 6 days in sunny warm conditions. No adult Graceful Sunmoth were recorded in the study area (Western Wildlife, 2012). There is only a low probability that the area supports a small population, as the larval food plants were present and Graceful Sunmoths are known from the surrounding areas (Western Wildlife, 2012).

As the area under application overlays limestone consideration needs to be given to subterranean fauna such as Stygofauna and Troglifauna species. 'Stygofauna are obligate aquatic subterranean animals that live within fresh or saline groundwater systems associated with karst (limestone caves/fissures) whereas Troglifauna are obligate fauna that live in air chambers in caves and/or rock fissures above such systems' (Humphreys, 2006). Although the clearing of native vegetation may not directly impact subterranean fauna, the removal of trees may have a detrimental impact on Stygofauna and Troglifauna if the tree roots had been utilised as a food source. It is noted that the applicant had modified the excavation footprint so that, where possible, large Tuart trees are not removed. The applicant has sought to minimise any potential impact by keeping a separation of 4 to 7 meters from the highest known water table and making commitments to stop work and completing assessments of any underground karst if it is encountered during excavation (WA Limestone, 2011).

The Fauna Assessment prepared by Western Wildlife (2007) states that although the site performs some linkage functions, the development of the site is not likely to isolate other local areas of native vegetation. However, it will reduce the linkage between areas of native vegetation to the east of Neerabup National Park and the South of the Lake Nowergup, and increase distances that fauna may have to negotiate (Western

Wildlife, 2006). The risk of predation will increase with the distance with which fauna has to negotiate between remnant patches of vegetation. These contiguous linkages have been severed by the creation of many roads however avian fauna will not be affected by this.

The applicant has advised that less than 30 per cent of the property is to be taken and it will be returned to native vegetation, therefore any change to the linkage will be temporary. While it is noted the application area will be rehabilitated, considering the lag time associated with restoring environmental values and the risk of failure, this will not mitigate the impacts to the linkage or to native fauna.

Considering the information above the vegetation under application is considered to be significant habitat for fauna indigenous to Western Australia.

Therefore this application is at variance to this clearing principle.

**Methodology**

References:

Burbidge (2004)  
DEC (2007-)  
DEC (2011a)  
Humphreys (2006)  
Landform Research (2010)  
Shah (2006)  
WA Limestone (2011)  
Western Wildlife (2006)  
Williams (2008)

GIS Databases:

- Pre-European vegetation  
- SAC Biodatasets - accessed May 2011

**(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 search of Department of Environment and Conservation (DEC) databases identified two species of rare flora recorded within the local area (10km radius); *Eucalyptus argutifolia* and *Marianthus paralius*.

*Marianthus paralius* is unlikely to occur in the application area as the nearest occurrence is some distance away and it is only found on or near coastal areas.

*Eucalyptus argutifolia* has been recorded immediately east of the area under application and is known to occur on high quality limestone.

A Vegetation and Flora Assessment has been conducted by Landform Research (2010) and did not identify any rare flora within the proposed clearing area.

Whilst the Vegetation and Flora Assessment (Landform Research, 2010) was not undertaken at the optimum time of year, *Eucalyptus argutifolia* can be easily identified at any time of year and it is unlikely that the application area will support *Marianthus paralius*. Therefore, the proposed clearing is not likely to be variance to this principle.

**Methodology**

References:

Landform Research (2010)

GIS Databases:

- Pre-European vegetation  
- SAC Biodatasets - accessed May 2011

**(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 may be at variance to this Principle**

The application area is within the buffer zone of the Threatened Ecological Community (TEC) *Melaleuca huegelii* - *M. systema* shrublands on limestone ridges (TEC Type 26a)(Gibson et al 1994). The local area (10km radius) contains 32 occurrences of this endangered TEC.

Landform Research (2010) has identified two occurrences of TEC Type 26a within Lot 1. This TEC has been identified in the south and along the eastern edge of the property. The identified TEC's have been excluded from the proposed clearing area.



A 20 meter buffer is proposed between the excavation site and the TEC. The most significant threats to this community type are clearing for mining, too frequent fire, weed invasion, impacts of recreation use and illegal rubbish dumping.

The proposed clearing will increase the risk of these TEC's being affected by edge effects such as weed invasion. Accumulation of dust resulting from the end land use may have a physical affect on the functioning of these plant communities due to increased stress (DEC, 2011b).

The applicant has advised that a 20 meter buffer is considered adequate. The basis for this statement is that the remaining vegetation will sit higher than the working quarry and therefore the risk of weed incursion is reduced (WA Limestone, 2011). In relation to the end land use it has been advised that the vegetation remaining above the steep cuts of the quarry will remain in excellent condition (WA Limestone, 2011). The vegetation condition remains the same because the vegetation is shrub like and adapted to limestone and does not depend on the watertable (WA Limestone, 2011).

Although TEC 26a has been excluded from the clearing area DEC is of the opinion that the vegetation under application may be necessary for the continued existence of this endangered community.

Therefore, the clearing as proposed may be at variance to this principle.

**Methodology**

**References:**

- DEC (2011b)
- Landform Research (2010)
- WA Limestone (2011)

**GIS Database:**

- Pre European Vegetation - DA 01/01
- Perth Metropolitan Area North 20cm Orthomosaic - Landgate 2007
- SAC Biodatasets - accessed May 2011

**(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 identified as Beard Vegetation Association 998 of which there is approximately 38.5 per cent of its pre-European extent remaining within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (Shepherd, 2009).

The application area is also mapped as Hedde Vegetation Complex's, Cottesloe Complex Central and South, and Herdsman Complex of which 41.1 and 34.3 per cent of their pre-European extent are remaining respectively.

The local area has approximately 60 per cent of native vegetation remaining with the majority located within Gngangara - Moore River State Forest, Yanchep and Neerabup National Parks, Neerabup and Lake Joondalup Nature Reserves.

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 application area contains a high level of biodiversity, significant fauna habitat and may be necessary for the continued existence of an endangered TEC and is therefore significant as a remnant. However, as the local area retains about 60 per cent native vegetation the area is not considered to be extensively cleared.

Although the vegetation under application is a significant remnant it is not located within an area which has been extensively cleared. Therefore, the clearing as proposed is not likely to be at variance to this principle.

	Pre-European (ha)	Current Extent Remaining (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Swan Coastal Plain	1 501 209.19	587 889.09	39.16	33.31
Shire*				
City of Wanneroo	67 698.09	32 088.84	47.4	50.7
Beard Vegetation Association in Bioregion* 998	50 867.10	19 595.27	38.52	40.66
Hedde Vegetation Complex **				
Cottesloe Complex Central and South		44 995	18 474	41.1
				8.8

Herdsmen Complex 8 309 2 875 34.3 11.5

\* (Shepherd, 2009)  
\*\* (Heddle et al., 1980)

**Methodology**

References:

Commonwealth of Australia (2001)  
Heddle et al. (1980)  
Shepherd (2009)

GIS Database:

- Local Government Authorities - DLI 8/07/04  
- Pre European Vegetation - DA 01/01  
- Perth Metropolitan Area North 20cm Orthomosaic - Landgate 2007  
- SAC Biodatasets - accessed May 2011

**(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**

**Comments**

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

There are no watercourses or wetlands within the area under application.

Lake Nowergup is the closest water feature and is located 400 meters north of the proposed clearing site.

The site inspection (DEC, 2011a) and Vegetation and Flora Assessment (Landform Research, 2010) did not identify any wetland dependant vegetation. Therefore, the vegetation under application is not considered likely to be associated with a watercourse or wetland.

The north east corner of the application area is lower in elevation, however does not contain any wetland species (Landform Research, 2010).

Therefore, the proposal is not likely to be at variance to this principle.

**Methodology**

References:

DEC (2011a)  
Landform Research (2010)

GIS Database:

- Geomorphic Wetlands (Mt Categories), Swan Coastal Plain  
- Hydrogeology, 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 property under application is underlain by Tamala Limestone which is widespread along the coastal area of Western Australia (Landform Research, 2011). Sand shed from the weathering limestone provides the soil cover on the limestone deepening on the north west corner (Landform Research, 2011).

The porous nature of the soils within the application area indicates that the site is well drained and therefore very little overland surface water flow is expected thereby minimising the risk of water erosion.

The proposed clearing has a high risk of wind erosion due to the high sand content and relative ease at which these materials can be transported by wind.

The area under application has a low risk of salinity and there is no known risk of acid sulphate soils associated with the area under application.

Given the high risk of wind erosion the proposed clearing may be at variance to this clearing principle.

The proponent has advised in their application that they propose to remove the vegetation by pushing it into windrows for use on the batters to minimize soil erosion. This approach along with the proposed staged clearing will assist in minimising appreciable land degradation.

**Methodology**

References:

Landform Research (2011)

- GIS database:
- Acid Sulfate Soil Risk Map, Swan coastal Plain
  - Average Annual Rainfall Isohyets
  - Hydrography, linear
  - Topographic contours 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 at variance to this Principle**

The area under application lies within close proximity to Nowergup National Park, Nowergup Nature Reserve, Nowergup Lake Fauna Reserve and Bush Forever site 383.

Nowergup National Park is located 150 meters west of the application area directly across Wanneroo Road. Neerabup Nature Reserve is located 160 meters north, across Nowergup Road and encompasses Lake Nowergup. Lake Nowergup is the largest fresh water lake in Perth Surrounds. This area is also listed on the Register of National Trust as Nowergup Lake Fauna Reserve. The lake area and surrounds provide suitable habitat for diverse populations of water birds (DSEWPC, 2011).

Bush Forever site 383 is located north and west of the proposed clearing area. Lot 1 encompasses this Bush Forever site and is owned by PMR Quarries. The closest boundary is 60 meters north and is located within the northern section of Lot 1. Bush Forever site 383 was selected for protection due to its 'Representation of ecological communities, rarity, maintaining ecological processes or natural systems' (Department for Environmental Protection, 2000)

Western Wildlife (2007) has stated that the proposed clearing will reduce the linkage between the areas of native vegetation to the east of Neerabup National Park and the South of the Lake Nowergup, and increase distances that fauna may have to negotiate. The risk of predation will increase with the distance with which fauna has to negotiate between remnant patches of vegetation.

Considering the area under application contains a high level of biodiversity and significant fauna habitat this area is likely perform important linkage functions for fauna moving between conservation areas.

The applicant has advised that whilst these reserves are relatively close to Lot 1 it needs to be remembered that less than 30 per cent of the property is to be taken and it will be returned to native vegetation, therefore any change to the linkage will be temporary. While it is noted the application area will be rehabilitated, considering the lag time associated with restoring environmental values and the risk of failure, this will not mitigate the impacts to the linkage.

Given the close proximity of the application area to the conservation areas listed above the clearing as proposed will impact the environmental values of these areas through the increase potential for the intrusion of weeds and dieback and through the decreased capacity for fauna dispersal.

Considering the above the clearing as proposed is at variance to this principle.

**Methodology** References:  
 Department for Environmental Protection (2000)  
 DSEWPC (2011)  
 Western Wildlife (2007)

GIS Database:  
 - Bush Forever  
 - DEC Tenure  
 - Register of National Estate - Environment Australia

**(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 clearing as proposed is not likely to significantly increase surface water runoff due the permeable and porous nature of the sand and limestone present on Lot 1. Landform Research (2011) has advised that as the limestone is so porous the only potential runoff is minimal surface water during heavy storm events.

There are no watercourses or wetlands within the application area and therefore the proposed clearing is not likely to impact on the quality of surface water in any nearby watercourse or wetland.

The proposed clearing may increase the amount of rainwater that infiltrates into the groundwater. Landform Research (2011) estimates that recharge will be increased by 10% based on the vegetation and elevation above the water table. The proposed clearing is not likely to adversely impact on the quality of groundwater.

The proposal to clear 6.7 hectares of native vegetation is not likely to increase ground water salinity. Ground water salinity within the local area has been recorded as between 500 and 1000 milligrams per litre Total Dissolved Solids.

Considering the above information the clearing as proposed is not likely to be at variance to this principle.

**Methodology** References:  
Landform Research (2011)

GIS Database:  
- Groundwater Salinity Statewide  
- Hydrography, linear

**(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**  
Lot 1 consists of sandy, porous soils, which indicates that the application area is well drained.

No wetlands, watercourses or areas subject to inundation are mapped within the application area.

Based on the above, the clearing as proposed is not likely to increase the incidence or intensity of flooding.

**Methodology** GIS Database:  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
- Hydrography linear

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

**Comments**

Lot 1 is located within a 'Key Extraction Area', as identified within Statement of Planning Policy 2.4: Basic Raw Materials (SPP 2.4). Key Extraction Areas are considered regionally significant resources which should be recognised for future basic raw materials extraction and not be constrained by incompatible land uses or development (Western Australian Planning Commission, 2000). SPP 2.4 is designed to facilitate the extraction of basic raw materials close to major markets in the metropolitan region. The policy recognises the importance of ensuring the extraction of basic raw materials occurs with minimal detriment to the environment, including regionally significant bushland and in a manner that allows for the future use and development consistent with the long-term planning intentions for the area (Western Australian Planning Commission, 2000). SPP 2.4 does not remove obligations to identify environmental constraints that may determine the extent and/or manner in which a proposal can be implemented (Western Australian Planning Commission, 2000). SPP 2.4 specifically states that the development of land for the extraction of basic raw materials should not adversely affect the environment.

The applicant has advised that high-grade limestone is an essential part of all development in Perth for roads and houses, cement and other products. The northern metropolitan area is in potential short supply because of conservation issues and sterilisation by subdivisions and other developments (WA Limestone Pty Ltd, 2011).

DEC's Industry Regulation Branch has advised that an application for works approval has not been submitted.

The area under application falls within the Wanneroo Groundwater Area which is an area proclaimed under the Right in Water and Irrigation Act 1914. The Department of Water (DoW, 2011) has advised that the proposed extractive industry is located within the Nowergup and Wanneroo confined sub-area of the Wanneroo Groundwater area, where there is a requirement to obtain a licence for the use of groundwater. DoW (2011) further advised that these areas are fully allocated.

The applicant will be notified of their responsibility to liaise with the Department of Indigenous Affairs regarding their obligations under the Aboriginal Heritage Act 1972.

One hundred and fifty five (155) public submissions were received. Many of the environmental impact issues raised have been addressed in the assessment against clearing principles and above.

**Methodology** References:  
DoW (2011)  
WA Limestone Pty Ltd (2012)  
Western Australian Planning Commission (2000)

GIS Databases:



- RIWI Act, Groundwater Areas - DoW 13/07/06
- Town Planning Scheme Zones
- Aboriginal Sites of Significance

#### 4. References

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- City of Wanneroo (2009) City of Wanneroo Agenda of Ordinary Council Meeting 13 October, 2009. Proposed Extractive Industry, Lot 1 Wanneroo Road Nowergup, Page 70 (DEC Ref: A396084).
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- DEC (2011a) Site Inspection Report for Clearing Permit Application CPS 4310/1, Lot 1 Nowergup Road, Nowergup. Site inspection undertaken 17/05/2011. Department of Environment and Conservation, Western Australia (DEC Ref: A401287).
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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)