



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

<b>Purpose Permit number:</b>	CPS 4046/1
<b>Permit Holder:</b>	Great Sand Supplies Pty Ltd
<b>Duration of Permit:</b>	11 April 2011 – 11 April 2017

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

### PART I – CLEARING AUTHORISED

**1. Purpose for which clearing may be done**

Clearing for the purpose of road upgrade.

**2. Land on which clearing is to be done**

Crown Reserve 6203; State Forest 13 (Woottating 6562)

**3. Area of Clearing**

The Permit Holder must not clear more than 0.45 hectares of native vegetation within the area shaded yellow on attached Plan 4046/1.

**4. Application**

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

**5. Compliance with Assessment Sequence and Management Procedures**

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

### PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

**6. Avoid, minimise etc clearing**

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

**7. Dieback and weed control**

(a) When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- shall only move soil in *dry conditions*;
- ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and

- (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.

**8. Rehabilitation management plan (Offset)**

The Permit Holder must implement and adhere to the *RMP*.

**PART III - RECORD KEEPING AND REPORTING**

**9. Records must be kept**

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

- (a) In relation to the clearing of native vegetation authorised under this Permit:
  - (i) the species composition, structure and density of the cleared area;
  - (ii) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  - (iii) the date that the area was cleared; and
  - (iv) the size of the area cleared (in hectares).
- (b) In relation to the *RMP* pursuant to condition 8, a description of the *RMP* activities undertaken, in accordance with that *RMP*.

**10. Reporting**

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
  - (i) of records required under condition 9 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 11 January 2017 the Permit Holder must provide to the CEO a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 10(a) of this Permit.

**DEFINITIONS**

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

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

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

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

*mulch* means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

*RMP* means rehabilitation management plan 'Lot 5 Abercorn Road, The Lakes – Rehabilitation Management Plan February 2011' and endorsement from DEC Perth Hills District Office 'Monitoring Rehabilitation Success of Manaring Lake Sand Pit Off-set Area' (letter dated 11 March 2011); and

*weed/s* means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.



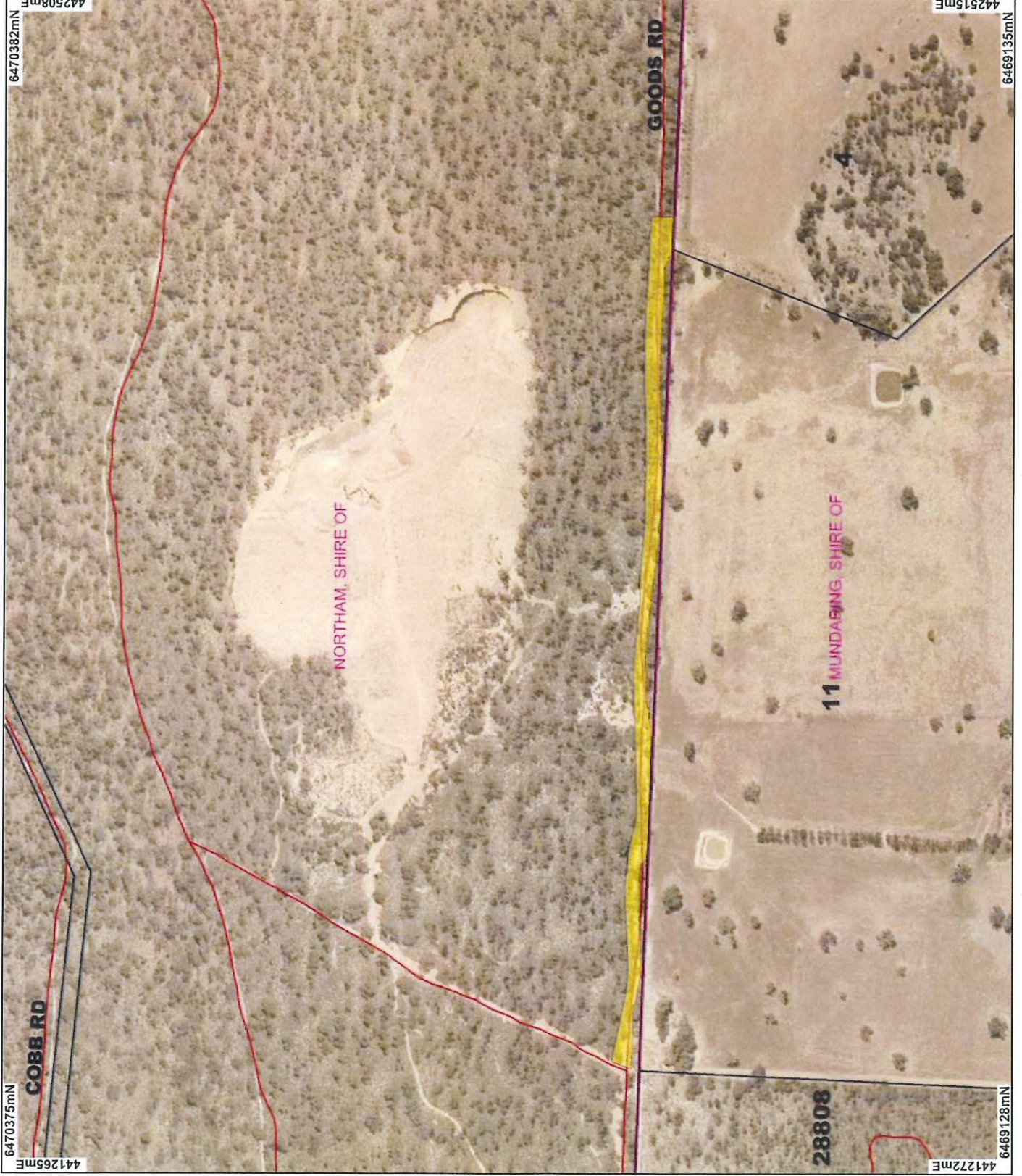
Kelly Faulkner  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

17 March 2011



# Plan 4046/1



## LEGEND

- Road Centrelines
- Local Government Authorities
- Clearing Instruments
- Areas Approved to Clear
- Northam 1m Orthomosaic - Landgate 2003
- Cadastral for labelling

\* Project Data is denoted by asterisk.  
 This data has not been quality assured.  
 Please contact map author for details.



Scale 1:6000  
 (Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

*[Signature]*  
 K Faulkner  
 Date 17/3/11

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

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



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## 1. Application details

### 1.1. Permit application details

Permit application No.: 4046/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Great Sand Supplies Pty Ltd

### 1.3. Property details

Property: CROWN RESERVE 6203;STATE FOREST 13 (WOOTTATING 6562)  
Local Government Area:  
Colloquial name: Goods Road reserve

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 17 March 2011

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
<p>The vegetation under application is mapped as:</p> <p>Beard vegetation associations</p> <p>4: Medium woodland; marri and wandoo</p> <p>3003: Medium forest; jarrah &amp; marri on laterite with wandoo in valleys, sandy swamps with teatree and Banksia (Hopkins et al 2001; Shepherd 2009)</p> <p>Mattiske vegetation complex</p> <p>Pindalup (Pn): Open forest of Eucalyptus marginata subsp. thalassica-Corymbia calophylla on slopes and open woodland of Eucalyptus wandoo with some Eucalyptus patens on the lower slopes in semiarid and arid zones. (Mattiske and Havel 1998)</p>	<p>The proposal is for the clearing of 0.45 ha of native vegetation within a 1.65 ha footprint for the purpose of upgrading Goods Road. This proposal is within State Forest 13 (Mundaring State Forest).</p> <p>The vegetation can be described as Jarrah-marri forest over gravelly soils. The vegetation under application is adjacent to the current road surface and shows some level of disturbance from road maintenance.</p> <p>The south side of the road being impacted by the adjacent boundary fence and weed invasion from the adjoining cleared paddocks with the vegetation considered to be in degraded to good (Keighery 1994) condition (DEC 2010).</p>	<p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)</p> <p>Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)</p>	<p>The vegetation condition and clearing description is based on information obtained during a site inspection by DEC officers undertaken on 9 December 2010 (DEC 2010). The vegetation ranges from degraded to excellent (Keighery 1994) condition (DEC 2010).</p>
As above	<p>The north side of the road comprises mostly structurally intact vegetation and shows limited disturbance with the vegetation considered to be in very good to excellent (Keighery 1994) condition (DEC 2010).</p>	<p>Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)</p> <p>Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)</p>	As above



### 3. Assessment of application against clearing principles

#### Comments

The vegetation can be described as Jarrah-marri forest over gravelly soils, with the vegetation including *Eucalyptus marginata*, *Eucalyptus wandoo*, *Xanthorrhoea gracilis*, *Macrozamia riedlei* and *Xylomelum occidentale* (DEC 2010). The vegetation adjacent to the current road surface shows some level of disturbance from the road maintenance with the south side of the road being impacted by the adjacent boundary fence and weed invasion from the adjoining cleared paddocks with the vegetation considered to be in degraded to good (Keighery 1994) condition (DEC 2010). The north side of the road comprises mostly structurally intact vegetation and shows limited disturbance with the vegetation considered to be in very good to excellent (Keighery 1994) condition (DEC 2010).

The proposed clearing is 0.45 hectares of native vegetation within Mundaring State Forest for the purpose of upgrading Goods Road. Given the vegetation under application is located within State Forest; the proposal may impact the environmental values of this conservation area through the potential spread dieback and weeds. Therefore, the proposed clearing may be at variance to Principle (h). Weed and dieback conditions would mitigate any impact the proposed clearing may have on conservation values.

The applied area is located 500m south of Wariin Brook (A tributary of the Helena River) and is situated within Zone A of the Mundaring Weir Catchment Area, an area having a very high salinity risk. This catchment area was proclaimed under Part IIA of the Country Areas Water Supply Act 1947, in 1978 to restrict any clearing of native vegetation that would cause salinisation of water resources (Department of Water 2007). This water resource has always been sensitive to even small areas of clearing, and recovery to potable salinity has required a series of revegetation (Smith et al 2007). Most of the salt load (63%) comes in from the north-east of the catchment by way of the Helena River; even though 97% of the catchment is forested, the salinity run off is very sensitive to the remaining 3% clearing; land clearing remains the major evident risk to the reservoir salinity so the catchment requires a level of salinity management (Smith et al 2007). Given this, the proposed clearing is likely to cause deterioration in the quality of surface or underground water and therefore is at variance to Principle (i). This likely impact may be offset through the revegetation or rehabilitation of native vegetation within Zone A of the Mundaring Weir Catchment Area. It is also noted that the proponent will be undertaking revegetation of nearby Lot 5 Abercorn Road as outlined in there approved Management Plan under the Shire of Mundaring's extractive industry licence (Shire of Mundaring, 2010).

A site visit (DEC 2010) of the applied area observed potential habitat trees with the 0.45 ha under application comprising 31 trees of various health to be cleared. No hollows were present in the trees to be cleared. Also the applied area has over a very gentle slope (Wells 1998) from east to west that would generally have a low susceptibility to soil erosion.

It is noted that road alignment has been positioned to minimise impacts to healthy trees and to avoid hollow-bearing trees. Further, road drainage shall be incorporated in the road upgrade; therefore the clearing proposal is only likely to cause short term water erosion.

Given the above the vegetation under application is considered to be at variance to clearing principle (i), maybe at variance to clearing principle (h) and is not likely to be at variance to the remaining clearing principles.

#### Methodology

##### References:

- Conservation Commission (2010)
  - DEC (2010)
  - Department of Water (2007)
  - Keighery (1994)
  - Smith et al (2007)
  - Wells (1988)
- GIS databases:
- CAWSA Part IIA Clearing Control Catchments
  - DEC, Tenure
  - Hydrography, linear
  - Northam 1m Orthomosaic - Landgate 2003
  - Rivers
  - Salinity Risk LM 25m - DOLA 00
  - SAC Bio Datasets 22/11/2010

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

#### Comments

A complaint of unauthorised clearing of approximately 0.0202 ha within Goods Road was investigated by the Department of Mines and Petroleum, in accordance with an administrative agreement with the Department of Environment and Conservation. On the 21 October 2010 a formal letter of warning was issued to ACG Earthmoving (a company affiliated with Great Sand Supplies).

The proposal is to clear up to 0.45 ha of native vegetation within State Forest 13 (Mundaring State Forest) for

the purpose of upgrading Goods Road to facilitate truck movement to the quarry site on Lot 5 Abercorn Road. The current road surface is approximately 6 m wide and the upgrade is to clear up to 5 m along approximately 900 m length of Goods Road, to widen the road surface, an install a road shoulder and v drain (DEC 2010).

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The proposal is to clear up to 0.45 ha of native vegetation within State Forest 13 (Mundaring State Forest) for the purpose of upgrading Goods Road to facilitate truck movement to the quarry site on Lot 5 Abercorn Road. The current road surface is approximately 6 m wide and the upgrade is to clear up to 5 m along approximately 900 m length of Goods Road, to widen the road surface, an install a road shoulder and v drain (DEC 2010).

The applied area is located in close proximity to two applications that were refused a permit to clear. These applications were:

- CPS 365/1 application to clear 2 ha of native vegetation for sand extraction, refused on 9 July 2007 with the proposal being seriously at variance to Principle (i). CPS 365/1 received an appeal against the refusal of the permit. The Minister's decision dated 27 March 2008 dismissed the appeal; and
- CPS 2962/1 application to clear 6.5 ha (subsequently amended to 9.3 ha) of native vegetation for sand extraction, refused on 3 December 2009 with the proposal being seriously at variance to Principle (i). CPS 2962/1 received an appeal against the refusal of the permit. The Minister's decision dated 3 December 2010 dismissed the appeal. The Minister suggested that the appellant first demonstrate that the potential salinity impacts can be mitigated and offset to the requirements of the Department of Water, prior to submitting a new application.

The applied area is located within the Proclaimed Surface Water Area, Mundaring Weir Surface Water Area and any interference with bed and banks would require a licence from the Department of Water. The applied area falls within Zone A of the Mundaring Weir Catchment, which is subject to clearing controls under the Country Areas Water Supply Act 1947.

The Department of Water (2010) advised the proposed works lies with Zone A, a very high salinity risk part of the Mundaring Weir Catchment Area. DoW policy and guidelines allows for required clearing similar to that of essential government works subject to an equivalent area being reforested within the Mundaring Weir catchment Zone A to mitigate the salinity impact of the proposal and that 'Although the application to clear is by Great Sand Supplies the vegetation is State Forest hence the clearing can be considered government works'.

The Conservation Commission has endorsed the proposed clearing within State Forest 13 subject to the full implementation of the proponent's Construction and Ongoing Maintenance Environmental Management Plan, and the proponent implementing a suitable offset, of at least 2:1 offset area ratio, for the impacts of the vegetation clearing (Conservation Commission 2010). An offset has been developed in consultation with DEC Perth Hills District. This offset would mitigate any salinity impact from this proposal.

DEC has received a copy of the Shire of Mundaring Approval for Extractive Industry Licence for Lot 5 Abercorn Road, the Lakes and documentation outlining the potential agreement for the use of Lot 4 Abercorn Road for an access road (an extension to Good Road) to Lot 5 Abercorn Road (360 Environmental 2010). The Management Plan that approved as part of the Extractive Industry Licence has designated Flynn Road then Goods Road as the access roads and outlines a commitment to upgrade Goods Road (ACG Earthmoving 2010).

The approval from the Shire of Mundaring occurred as a result of the proposal for sand extraction was presented to the State Administrative Tribunal (SAT). On 30 June 2008 SAT approved the application by ACG Earthmoving for sand extraction subject to conditions as reforestation to mitigate groundwater and salt discharge to Wariin Brook, even though the proposal did not involve the clearing of native vegetation. Also it was understood that clearing may be required along a 2 km section of Goods Road to provide access for trucks and the applicant has committed to seal Flynn Road and Goods Road.

The Shire of Northam (2010) advised that as the land is reserved under the Shire's Town Planning Scheme No. 3 as 'Reserve-State Forest', the Shire has limited control over the property. Shire approval is not required so long as DEC permission is granted for the work to occur.

A submission (2010) was received in objection to the proposed clearing to upgrade the current access road. Concerns were raised in relation to:

- The road forms part of two approved mining tenements and the upgrade of Goods Road into a haul road will impact the future operations of the mining tenements by decreasing the amount of land available for mining, the ability to expand the existing quarry; the impacts to mining tenements granted in accordance with the Mining Act 1978 (WA) is a matter to be addressed through the Department of Mines and Petroleum.
- The significant environmental impacts from salinity; this is addressed in the assessment of the application.

There is one Aboriginal Site of Significance listed within the area under application, the applicant will be



advised of their obligations under the Aboriginal Heritage Act 1972.

#### Methodology

##### References:

- ACG Earthmoving (2010)
- Conservation Commission (2010)
- DEC (2010)
- Department of Water (2010)
- Shire of Northam (2010)
- Submission (2010)
- 360 Environmental (2010)

##### GIS Databases:

- Aboriginal Sites of Significance
- Cadastre
- CAWSA Part IIA Clearing Control Catchments
- RIWI Act, SurfaceWater Areas, Irrigation Districts

## 4. References

- 360 Environmental (2010) Extractive Industry Licence and Water Corporation Agreement (Email), 360 Environmental. DEC Ref A353202
- Wells, M. (1988) A Method of Assessing Water Erosion Risk in Land Capability Studies - Swan Coastal Plain & Darling Range. Resource Management Technical Report No. 73. Department of Agriculture, Western Australia. ISSN 0729 - 3135.
- ACG Earthmoving (2010) Extract of Management Plan Approved with Shire of Mundaring Extractive Industry Licence (Email). DEC Ref A357485 and A357505
- Conservation Commission (2010) Minutes of Meeting No 112 Monday 9 November 2009, Conservation Commission Western Australia. DEC Ref A352520
- DEC (2010) Site Inspection Report for Clearing Permit Application CPS 4046/1, Goods Road, The Lakes. Site Inspection undertaken 9/12/2010, Department of Environment and Conservation, Western Australia. DEC Ref A353821
- Department of Water (2007) Mundaring Weir Catchment Area Drinking Water Source Protection Plan, Water Resource Protection Series Report No. 69. Water Corporation, Western Australia.
- Department of Water (2010) Direct Interest Submission for Goods Road, The Lakes. DEC Ref A354292
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Shire of Northam (2010) Direct Interest Submission for Goods Road, The Lakes. DEC Ref A351508
- Smith RA, Bari MA, Dixon RNM and Rowlands DW (2007) The Helena River Salinity Situation Statement, Water Resource Technical Series Report No. WRT 34, Department of Water, Western Australia.
- Submission (2010) Direct Interest Submission for Goods Road, The Lakes. DEC Ref A347184

## 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)