



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 2865 / 1

File Number: DEC9861

Duration of Permit: From 23 January 2009 to 23 January 2011

PERMIT HOLDER

Temov Holdings Pty Ltd

William Francis Murray

Kyla Naomi Murray

Norm Trandos

Cane Spaseski

Terry Peovitis

Nicholas Peovitis

Koios Nominees Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

LOT 3912 ON PLAN 170721 (NILGEN 6044)

AUTHORISED ACTIVITY

Clearing of up to 5.1 hectares of native vegetation within the area cross-hatched yellow on attached Plan 2865/1.

CONDITIONS

Nil.

A handwritten signature in black ink, appearing to read "Kelly Faulkner", written over a horizontal line.

Kelly Faulkner

MANAGER

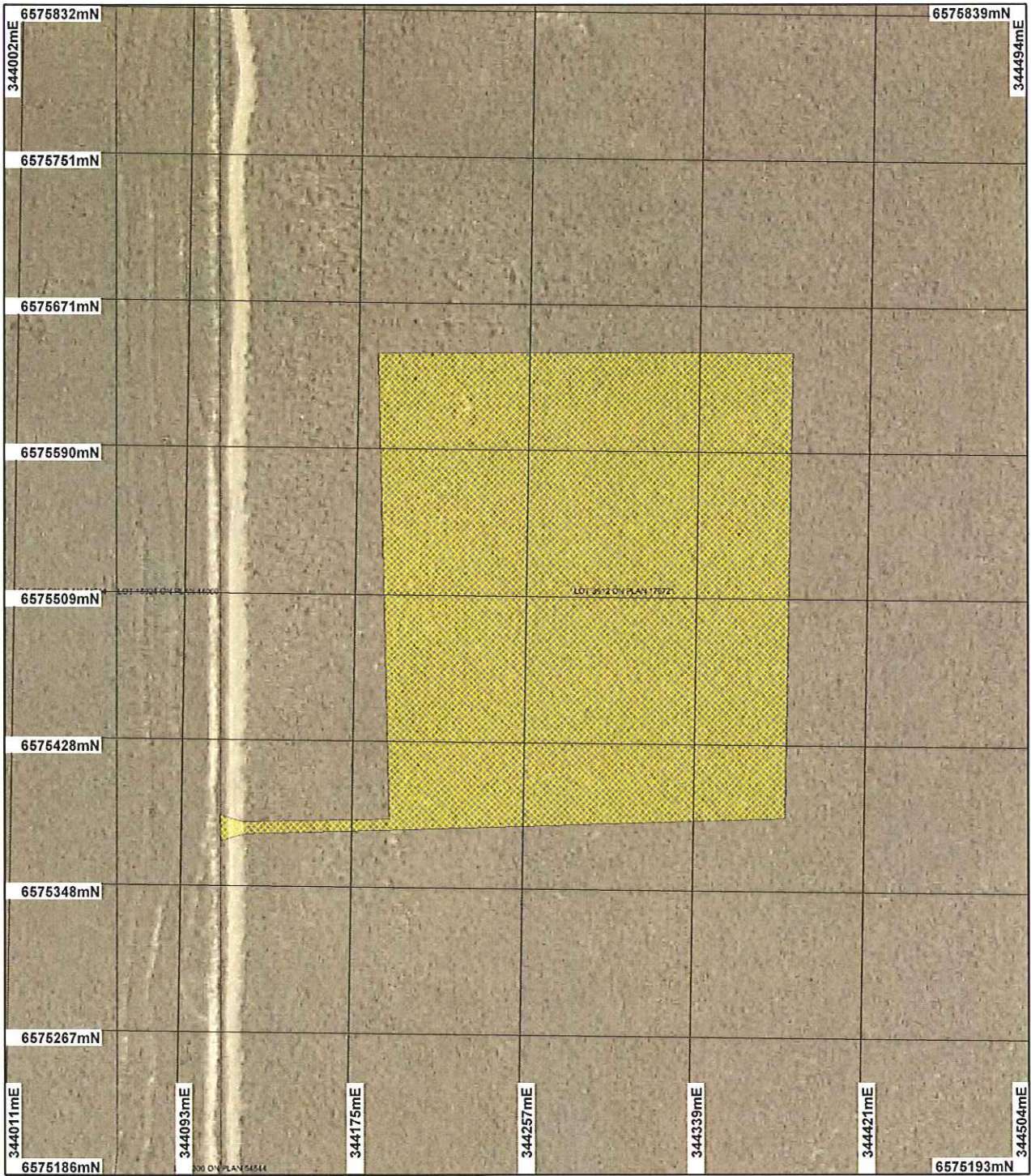
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20

of the Environmental Protection Act 1986

23 December 2008

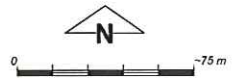
Plan 2865/1



LEGEND

- Clearing Instruments**
- Areas Approved to Clear
 - Road Centrelines
 - Cadastre for labelling

Wedge Island 1.4m
Orthomosaic - Landgate
2004



Scale 1:3000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

Date 23/12/02

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

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



Department of Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 2865/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Paul Temov

1.3. Property details

Property: LOT 3912 ON PLAN 170721 (NILGEN ROAD, NILGEN 6044)
 Local Government Area: Shire Of Gingin
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
5.1		Mechanical Removal	Building or Structure

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: 1029 - Shrublands; scrub-heath dryandra-calothamnus association with Banksia prionotes on limestone in the northern Swan Region (Shepherd 2007)	The proposal is to clear 5.1 hectares of native vegetation from a large (~560 ha) remnant of native vegetation located within Lot 3912. The clearing is required for a Main Roads Depot for the storage of limestone road base and parking of machinery to be used for the construction of the Lancelin-Cervantes Road.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The vegetation condition and clearing description was obtained from aerial orthomosaics and a DEC site inspection conducted on 11/12/2008.
	The vegetation under application comprises dense Banksia and Calothamnus heath. The vegetation includes Banksia prionotes, B. nivea, Xanthorrhoea preissii, Calothamnus quadrifidus, Jacksonia spp, Chamelaucium spp, Mesomelaena spp and Petrophile species, with limited patches of bare soil. The vegetation within the applied area is considered to be in overall excellent condition.		

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 comprises dense, low lying Banksia (formerly known as Dryandra) and Calothamnus heath. Other species observed on site, included Xanthorrhoea preissii, Melaleuca spp, Banksia prionotes, B. nivea, Jacksonia spp, Chamelaucium spp, Petrophile spp. and Mesomelaena species with limited areas of bare soil and minimal weeds. The vegetation within the applied area is considered to be in excellent condition (DEC, 2008).

Within the local area (10km radius) there are nine known populations of six species of priority flora, the closest *Banksia dallanneyi* subsp. *pollostata* (P3) is located approximately 1.7 km from the applied area and is found within the same vegetation complex and soil type as the area under application.

The dense vegetation under application is likely to provide suitable habitat for a range of ground dwelling fauna species such as the Quenda, Kangaroo, snake and lizard species and foraging bird species. In particular, the Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) (EPBC Act, Endangered) has been recorded 650 metres to the southwest and a bird of prey was observed hovering south of the applied area (DEC, 2008).

Given that the vegetation under application has the potential to support a range of native fauna species and may provide suitable habitat for the priority flora species *B. dallanneyi* subsp. *pollostata*, it is considered that the applied area may be considered to be an area of high biological diversity.

Methodology **References:**
- DEC (2008)
- Western Australian Herbarium (1998)
GIS Databases:
- SAC BIO datasets - accessed on 15/12/2008
- Wedge Island 1.4m Orthomosaic - DLI Mar/04

(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 not likely to be at variance to this Principle**
The area under application is located in a large remnant (~560 ha) within Lot 3912. A site inspection of the applied area identified the vegetation under application as comprising low scrub/heath of *Banksia*, *Calothamnus* and *Xanthorrhoea* in excellent condition, with a high level of biological diversity (DEC, 2008).

The Carnaby's Black-Cockatoos (*Calyptorhynchus latirostris*) (EPBC Act, Endangered) have been recorded within 700 metres of the applied area and are known to feed on the seeds and nectar from the flowers of Proteaceous shrubs and heaths, vegetation which is similar to that found within the area under application. The vegetation under application includes these species and has the potential to provide suitable feeding habitat for the Carnaby's Black-Cockatoo and other local foraging bird species.

In addition, the dense vegetation under application is likely to provide suitable habitat for a range of ground dwelling fauna species such as the Quenda, snakes and lizards. During the DEC site inspection, Kangaroo skats were observed within the area under application and a hovering bird of prey was sighted to the south of the applied area.

Although the vegetation within the area under application is in excellent condition and contains habitat values, it is not considered to comprise significant habitat, given the relatively small size of the proposed area to be cleared (5.1 ha) and the extensive surrounding remnant vegetation. Therefore, the proposed clearing is not considered likely to be at variance to this Principle.

Methodology **References:**
- Burbidge (2004)
- DEC (2008)
GIS Databases:
- SAC BIO datasets - accessed on 15/12/2008
- Wedge Island 1.4 Orthomosaic - DLI Mar/04

(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 no known records of rare flora within a 10 km radius of the area under application. The closest rare flora, *Eucalyptus crispata* is located approximately 15.5km from the applied area and is known to occur within a different vegetation complex and soil type to that found within the area under application.

Given the above, it is not considered likely that the vegetation under application includes, or is necessary for the continued existence of, rare flora.

Methodology **References:**
- Brown et al (1998)
- DEC (2008)
- Western Australian Herbarium (1998)
GIS Databases:
-Pre-European Vegetation - DA 01/01

(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 are no known occurrences of Threatened Ecological Communities (TEC) within the local area (10km radius), with the closest known occurrence being identified as Floristic Community Type SCP07 - Herb rich saline shrublands in clay pans, which is located approximately 40km south east of the area under application.

Given the distance to this TEC and given that this TEC is found on different soils and within a different vegetation complex to the applied area, the proposed clearing is not likely to impact on, or be necessary for the maintenance of this TEC.

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

Methodology References:

- DEC (2008)
- GIS Databases:
 - Pre-European Vegetation - DA 01/01
 - SAC BIO datasets - accessed on 15/12/2008
 - Soils, Statewide - DA 11/99

(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 is described as Beard Vegetation Association 1029 of which there is 75% of pre-European extent remaining (Shepherd, 2007).

The area under application is located within the Shire of Gingin of which there is 56.3% of pre-European extent remaining. The vegetation under application is also within the Swan Coastal IBRA Region of which there is 43.0% of pre-European extent remaining.

The State Government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents the clearance of ecological communities with an extent below 30% of that present pre- European settlement (Commonwealth of Australia 2001).

Beard Vegetation Association 1029 is above the State Government's Target for Biodiversity Conservation at 75% pre-European extent remaining. Given this and that the applied area (5.1ha) is contained within a large remnant (~560 ha) in Lot 3912, and the proximity of the adjacent Nilgen Nature Reserve (~4,606 ha) which comprises the same vegetation type as that found on site, it is not considered likely that the vegetation under application is significant as a remnant in the local area.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	In secure tenure (%)
IBRA Bioregions				
Swan Coastal Plain*	1,529,235	657,450	43.0	
Shire of Gingin *	315,560	177,688	56.3	
Beard Vegetation Association:**				
1029	71,035	53,285	75.0	34.79

* (Shepherd et al. 2001)

** (Shepherd 2007)

*** (Department of Natural Resources and Environment 2002)

Methodology References:

- Commonwealth of Australia (2001)
- EPA (2006)
- Shepherd (2007)
- Shepherd et al. (2001)
- GIS Databases:
 - Pre-European Vegetation - DA 01/01
 - Interim Biogeographic Regionalisation of Australia
 - SAC Bio datasets - Accessed 15/12/2008

(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 is not likely to be at variance to this Principle

There are no mapped wetlands or watercourses within a 10km radius of the area under application. The closest hydrological features are Karakin Lakes, and Caro Brook which are respectively located approximately 15km southeast and 12km northeast of the applied area. In addition, the Indian Ocean is located approximately 6.7km to the west.

During the site inspection (DEC, 2008) the vegetation under application was identified as being representative of an upland vegetation community, at an elevation of between 120-140 metres.

Given the high elevation of the area proposed to be cleared, the distance to the nearest watercourses and the vegetation's resemblance to an upland vegetation community, the vegetation under application is not considered to be growing in, or in association with, an environment associated with a watercourse or wetland.

Methodology

References:

- DEC (2008)

GIS Databases:

- EPP, Areas - DEP 06/95

- EPP, Lakes - DEP 28/07/03

- Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC

(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 vegetation under application is identified as containing soil type B24. These soils are associated with undulating dune landscape underlain by aeolianite which is frequently exposed, with small swales of estuarine deposits and chief soils of siliceous sands (Northcote et al 1960-68). The identified soils generally have a low risk of water logging and a nil to low risk of salinity.

The main land degradation risk associated with the removal of vegetation on the identified soil type is considered to be a very high risk of wind erosion (Department of Agriculture, 2005). The high wind erosion potential is due to the sandy nature of the soils and without appropriate vegetation cover, windbreaks or adequate dust suppression on exposed surfaces the proposal may result in appreciable land degradation.

However, given that the proposal is for a Main Roads Depot for the purpose of stockpiling limestone and the parking of machinery, a compacted limestone base will be applied over the sandy surface which will minimise the risk of wind erosion. Furthermore, the vegetation surrounding the entire applied area should reduce wind velocity which would minimise the wind erosion risk even further.

Given the above, it is considered that the proposed clearing is unlikely to be at variance to this Principle.

Methodology

References:

- DEC (2008)

- Department of Agriculture (2005)

- Northcote et al (1960-68)

GIS Databases:

- Salinity Risk LM 25m - DOLA 00

- Soils, Statewide - DA 11/99

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

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

There are two areas reserved for conservation purposes within a 10km radius of the area under application, being the Nilgen Nature Reserve and Bashford Nature Reserve.

The Nilgen Nature Reserve is located approximately 80 metres west of the applied area and covers a total area of 4,606 hectares. The majority of Nilgen Nature Reserve is listed under the Register of National Estate and is also listed as a System 5 Conservation Reserve. Bashford Nature Reserve is located approximately 5.6km northeast of the applied area and covers a total area of 101 hectares.

Given that the area under application (5.1ha) is contained in a ~560 hectare remnant within Lot 3912 and that the Lancelin-Cervantes Road separates the applied area from the Nilgen Nature Reserve, it is not considered likely that the proposed clearing is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Therefore, the proposed clearing is not considered likely to be at variance to this Principle.

Methodology References:
- DEC (2008)
GIS Databases:
- CALM Managed Lands and Waters
- Register of National Estate
- System 1 to 5 and 7 to 12 Areas

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

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

The area under application has a nil to low risk of salinity and is not located within a Public Drinking Water Source Area (PDWSA). The nearest wetland is a Conservation Category Wetland (CCW) identified as Karakin Lakes which is located approximately 15km to the southeast and the nearest watercourse is Caro Brook which is situated approximately 12km northeast of the area under application.

Given the high infiltration rates of the sandy soil identified within the applied area, and the distance to the nearest watercourse and wetland, it is not considered likely that the proposed clearing would cause deterioration in the quality of surface or underground water.

Methodology References:
- DEC (2008)
GIS Databases:
- Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC
- Public Drinking Water Source Areas (PDWSA's) DOW

(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 is located at an elevation of between 120-140 metres within an undulating landscape. The soils identified on site are described as siliceous sands which have a low risk of water logging due to their poor water holding capacity (Department of Agriculture, 2005).

Given that there is a low risk of water logging associated with the identified soil type on site and the high permeability of these sandy soils, it is not considered likely that the proposal would have an impact on peak flood height or duration.

Methodology References:
- DEC (2008)
GIS Databases:
- Hydrographical, Linear - DOE 01/02/04
- Soils, Statewide - DA 11/99
- Topographic Contours, Statewide - DOLA 12/09/02
- Wedge Island 1.4 Orthomosaic - DLI Mar/04

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

Comments

There are no aboriginal sites of significance within the applied area.

The area under application is zoned rural and is freehold land owned by Temov Holdings Pty Ltd, William Francis Murray, Kyla Naomi Murray, Norm Trandos, Cane Spaseski, Terry Peovitis, Nicholas Peovitis and Koios Nominees Pty Ltd as Tenants in Common. The property owners have provided written consent for the clearing application (CPS2865/1) TRIM DOC.68713.

Although the area under application is located within an Intensive Land Use Zone defined in EPA Position Statement No. 2 (EPA, 2000), the proposed clearing is for the purpose of construction for a Main Roads Depot for the stockpiling of limestone road base for the Lancelin-Cervantes Road. Given that there is 75% of pre-European extent of the Beard Vegetation Association 1029 remaining and that the applied area (5.1ha) is contained in a large remnant (~560 ha) within Lot 3912, and the close proximity of Nilgen Nature Reserve (~4,606 ha), it is not considered likely that the vegetation under application is significant as a remnant in the local area.

In a submission an objection to the proposed clearing was lodged, stating the vegetation under application was fragile and the clearing could result in wind erosion issues. Recommended that the depot be relocated to areas that have already been cleared in the eastern portion of Lot 3912. TRIM DOC69871.

In a submission the Shire of Gingin advise that the Council has no objection to the clearing application as the

land clearing is to facilitate a land use which is "as of right" under the Council's Town Planning Scheme No.8. TRIM DOC 71680.

- Methodology** **References:**
- DEC (2008)
 - Submission, Direct Interest Submission, 2/12/2008, TRIM DOC 69871 (Private Submission)
 - Submission, Direct Interest Submission, 17/12/2008, TRIM DOC71680 (Shire of Gingin Submission)
- GIS Databases:**
- Aboriginal Sites of Significance - DIA
 - EPA Position Paper No 2 Agriculture Region
 - Town Planning Scheme Zones

4. Assessor's comments

Comment

The assessable criteria have been addressed and the proposed clearing may be at variance to Principle (a)

5. References

Brown A., Thomson-Dans C. and Marchant N.(1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.

Burbidge, A. (2004) Threatened Animals of Western Australia, Department of Conservation and Land Management, Perth, Western Australia.

Commonwealth of Australia (2001) National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra.

DEC (2008) Site Inspection Report for Clearing Permit Application CPS 2865/1 Main Roads Depot, Temov Holdings Pty Ltd. Site inspection undertaken 11/12/2008. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC71667).

Department of Agriculture (2005) AgMaps Land Manager CD-rom for the Shires of Serpentine-Jarrahdale, Kwinana, Rockingham, Mandurah, Murray, Boddington, Waroona and Harvey. Department of Agriculture, Western Australia. ISSN: 1448-235X.

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.

Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

Shepherd, D.P. (2007). 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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Simpson, K. and Day, N. (2004) Field Guide to the Birds of Australia, 7th edition, Penguin Group (Australia), Australia.

Submission, Direct Interest Submission, 17/12/2008, TRIM DOC71608.

Submission, Direct Interest Submission, 2/12/2008, TRIM DOC 69871.

Western Australian Herbarium (1998-). FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.calm.wa.gov.au/> Accessed on 17/12/2008.

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)