



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 5731/1
Permit Holder:	Shire of Mount Marshall
Duration of Permit:	4 January 2014 – 4 January 2019

ADVICE NOTE:

This Permit does not confer upon the Permit Holder authorisation to access the land to which the Permit relates.

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 constructing two truck bays.

2. Land on which clearing is to be done

Lucas Street road reserve (PIN 11434423), Beacon
Lot 670 on Deposited Plan 214242, Beacon
Lot 361 on Deposited Plan 210321, Beacon

3. Area of Clearing

The Permit Holder shall not clear more than 0.54 hectares of native vegetation within the areas hatched yellow on attached Plan 5731/1.

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. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

PART II – MANAGEMENT CONDITIONS

6. Weed control

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*:

- clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

DEFINITIONS

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

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;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in the former Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
- (c) not indigenous to the area concerned.

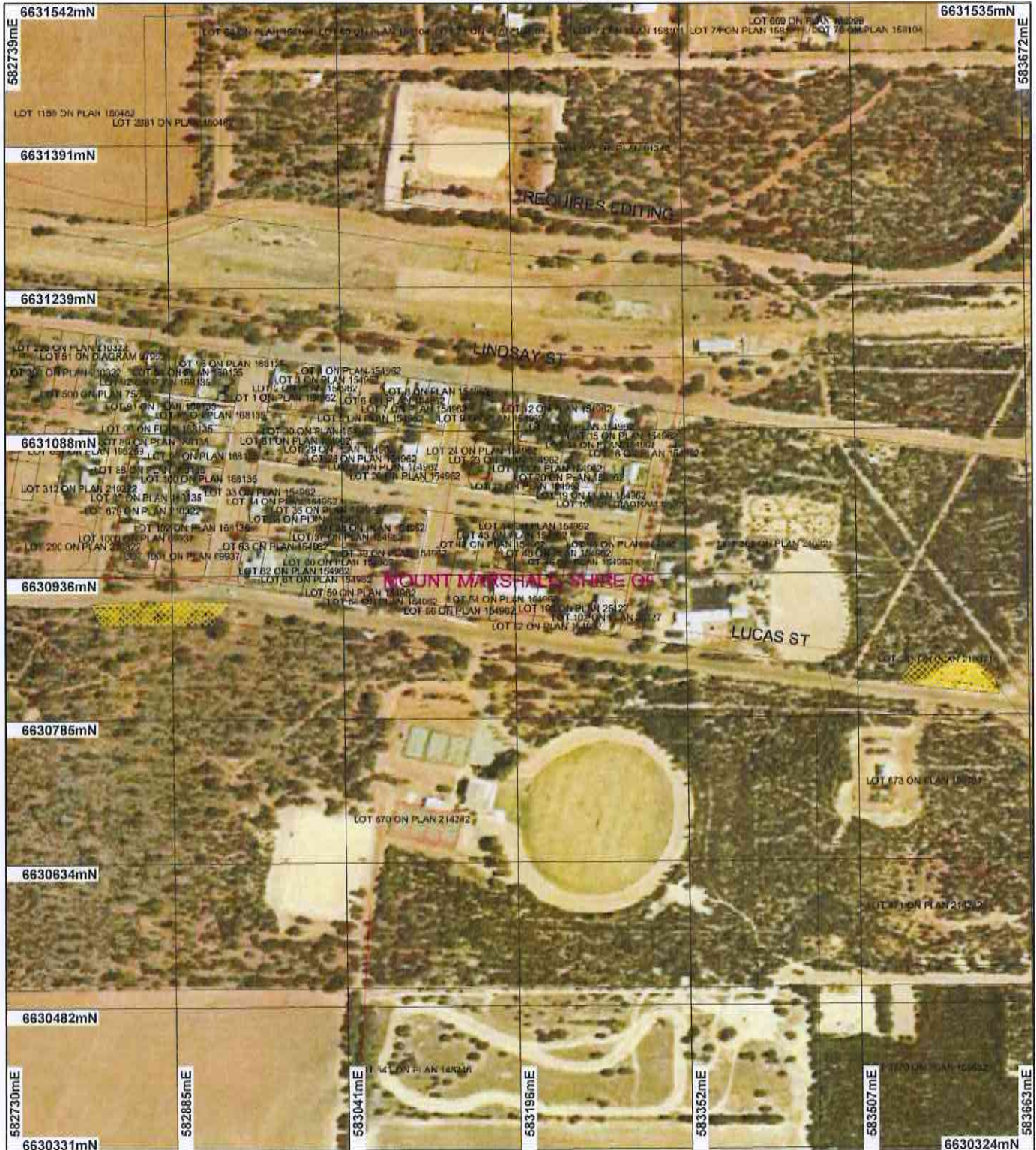


M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

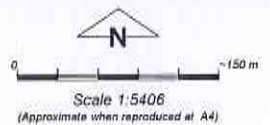
5 December 2013

Plan 5731/1



LEGEND

- Road Centrelines
 - Cadastre
 - Local Government Authorities
 - Clearing Instruments
 - Areas Approved to Clear
- Beacon 1.4m Orthomosaic - Landgate 2001



Geocentric Datum Australia 1994
 Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M. Warnock Date 5/12/13

M. Warnock
 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.



Government of Western Australia
 Department of Environment Regulation
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* Project Data Is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 5731/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Mount Marshall

1.3. Property details

Property: ROAD RESERVE (BEACON 6472)
LOT 361 ON PLAN 210321 (House No. 2 BURNETT BEACON 6472)
LOT 670 ON PLAN 214242 (House No. 10 LUCAS BEACON 6472)
Local Government Area: Shire of Mount Marshall
Colloquial name: Lucas Street road reserve

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 5 December 2013

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
Mapped Beard Vegetation Association 141 is described as Medium woodland; York gum, salmon gum & gimlet (Shepherd et al, 2001).	The amended area of proposed clearing consists of 0.54 hectares of native vegetation within Lot 361 on Deposited Plan 210321, Lot 670 on Deposited Plan 214242 - Reserve 36172 and Lucas Street road reserve, Beacon, for the purpose of constructing two truck bays.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994) To Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The vegetation within the easternmost truck bay is comprised of Allocasuarina acutivalvis, Allocasuarina campestris, Acacia resinomarginea, Acacia neurophylla, and Thryptomene species, with very few understorey species. The vegetation within the westernmost truck bay has been historically disturbed and is comprised of scattered Eucalyptus salubris, Acacia erinaceae, Allixia buxifolia, Santalum acuminatum, Ptilotus nobilis and Enchylaena tomentosa. The condition and description of the vegetation was established via a Botanical Survey (Shire of Bruce Rock, 2013).

3. Assessment of application against clearing principles

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

Comments

Proposal is not likely to be at variance to this Principle

The amended area of proposed clearing consists of 0.54 hectares of native vegetation within Lot 361 on Deposited Plan 210321, Lot 670 on Deposited Plan 214242 - Reserve 36172 and Lucas Street road reserve, Beacon, for the purpose of constructing two truck bays. The vegetation under application is in a good to degraded (Keighery, 1994) condition.

Five priority flora species (two priority 1, two priority 3 and one priority 4) have been recorded within the local area (20 kilometre radius) on the same soil and vegetation type as the application area. Priority 3 species are generally known from collections from several different localities not under imminent threat. Priority 4 species are considered to have been adequately surveyed and not in need of special protection, but could be if circumstances change. The proposed clearing of approximately 0.54 hectares within close proximity to the edge of the road is unlikely to impact on the conservation status of the priority 3 and 4 species.

Priority 1 species are known from only a few collections and appear to be under imminent threat from known threatening processes.

The two abovementioned priority 1 species have been mapped approximately 100 and 150 metres north of the application area. A botanical survey of the application area undertaken in November 2013 did not identify these species (Shire of Bruce Rock, 2013).

One species of rare flora has been mapped approximately 14 kilometres west of the application area. The botanical survey did not identify this species within the application area (Shire of Bruce Rock, 2013).

There are no priority or threatened ecological communities mapped within the local area (20 kilometre radius).

There is approximately 15 per cent pre-European vegetation remaining within the local area (20 kilometre radius) of the proposed clearing. Within highly cleared landscapes vegetation along road reserves is particularly important in facilitating fauna movement between fragmented remnant vegetation. The proponent has amended the application area to reduce the area of proposed clearing and minimise impacts to vegetation located within the Burakin - Wialki Road reserves.

The disturbance caused by the proposed clearing will increase the likelihood of weeds spreading into adjacent vegetated areas. Weed management practices will assist in mitigating the risk of spreading weeds.

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

Methodology

References:

- Keighery (1994)
- RCC (2006)
- Western Australian Herbarium (1998-)
- Northcote et al (1960-68)
- Shire of Bruce Rock (2013)

GIS Databases:

- SAC Bio Datasets (Accessed October 2013)
- NLWRA, Extent of Native Vegetation

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

Comments

Proposal is not likely to be at variance to this Principle

Four fauna species of conservation significance have been recorded within the local area (20 kilometre radius), these being, *Idiosoma manigrum* (shield-backed trapdoor spider), *Leipoa ocellata* (malleefowl), *Macrotis lagotis* (bilby), and *Aganippe castellum* (tree-stem trapdoor spider) (DPaW, 2007 -).

The shield-backed trapdoor spider has a preference for eucalypt woodland's in heavy clay soils. Malleefowl prefer habitat consisting of shrubland and low woodland on sandy or loamy soils that receive 200 to 450 millimetres of rainfall each year. Bilby's require sandy or loamy soil in which to burrow with a particular preference for sandy dunes and the tree-stem trapdoor spider has a preference for flood-prone depressions and flats (Department of the Environment, 2013).

Given the presence of sandy soils on site, and absence of flood-prone depressions, the application area contains potential habitat for the malleefowl and bilby. The single bilby record dates back to 1959, and it is unlikely that this species would have persisted in the landscape. The malleefowl was recorded (one record) within the application area in 2009, however it is unlikely that this species would utilise the vegetation under application given the small size and close proximity to the road.

The local area has been extensively cleared with approximately 15 per cent pre-European vegetation remaining. Within highly cleared landscapes vegetation along road reserves is particularly important in facilitating fauna movement between fragmented remnant vegetation. The proponent has amended the application area to reduce the area of proposed clearing and minimise impacts to vegetation located within the Burakin - Wialki Road reserve.

The proposed clearing is not likely to be at variance to this Principle.

Methodology

References:

- DPaW (2007 -)
- Department of the Environment (2013)

GIS Databases:

- NLWRA, Extent of Native Vegetation

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments Proposal is not at variance to this Principle

The closest species of rare flora has been mapped approximately 14 kilometres west of the application area. This species is a spreading shrub that flowers in spring and has a preference for clay loam, gravelly sand, sandy clay and road verges (Western Australian Herbarium, 1998-).

A botanical survey of the application area did not identify the presence of this species (Shire of Bruce Rock, 2013).

The proposed clearing is not at variance to this Principle.

Methodology References:

-Western Australian Herbarium (1998-)
-Shire of Bruce Rock (2013)

GIS Databases:

-SAC Bio Datasets (Accessed October 2013)

(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 at variance to this Principle

There are no threatened ecological communities (TEC's) mapped within the local area (20 kilometre radius), therefore the proposed clearing is not at variance to this Principle.

Methodology GIS Databases:

-SAC Bio Datasets (Accessed October 2013)

(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 may be at variance to this Principle

There is approximately 15 per cent pre-European vegetation remaining within the local area (20 kilometre radius) of the proposed clearing.

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 Avon Wheatbelt IBRA Bioregion and the Shire of Mount Marshall retain approximately 19 and 63 per cent pre-European vegetation respectively and Beard Vegetation Association 141 retains approximately 31 per cent pre-European vegetation within the Avon Wheatbelt.

Given that the Avon Wheatbelt IBRA Bioregion and local area retain less than the abovementioned 30 per cent threshold, and that the application area includes some vegetation in a good (Keighery, 1994) condition. The proposed clearing may be at variance to this Principle.

The proponent has amended the application area to reduce the area of proposed clearing and minimise impacts to vegetation located within the Burakin - Wialki Road reserve.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Avon Wheatbelt	9,517,110	1,778,408	19	10
Shire*				
Shire of Mount Marshall	1,018,424	639,699	63	47
Beard Vegetation Association in Bioregion*				
141	250,615	77,323	31	1

Government of Western Australia (2013)

Methodology References:

-Government of Western Australia (2012)
-Commonwealth of Australia (2001)

GIS Databases:
-NLWRA, Current Extent of Vegetation

(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 at variance to this Principle

The closest watercourse or wetland to the application area is located approximately 1.4 kilometres south. A tributary of the Beacon River is mapped approximately 4 kilometres west of the application area.

Given the distance to hydrological features, the proposed clearing does not include vegetation growing in, or in association with a watercourse.

The proposed clearing is not at variance to this Principle.

Methodology GIS Databases:
-Hydrography, linear
-Hydrography, hierachy

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal is not at variance to this Principle

The soils within the application area have been mapped by Northcote et al (1960-68) as hard alkaline red soils with associated red earths on broad flat valleys and gently undulating to rolling terrain, sandy yellow earths containing ironstone gravels, and yellow earthy sands often with ironstone gravels at depths on gently sloping to undulating plateau.

Sandy and gravelly soils are highly permeable, therefore water erosion resulting from the proposed clearing is unlikely, particularly given the low annual rainfall (400 millimetres) of the local area (20 kilometre radius).

Sandy soils are prone to wind erosion, however the small area of proposed clearing will not result in appreciable land degradation.

The proposed clearing is not at variance to this Principle.

Methodology References:
-Northcote et al (1960-1968)

GIS Databases:
-SAC Bio Datasets (Accessed October 2013)
-Rainfall, Mean Annual

(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

The closest conservation areas to the proposed clearing are North Beacon Nature Reserve and an un-named Nature Reserve which are located approximately 4.3 kilometres north and 2.3 kilometres south of the application area respectively.

The proponent has amended the application area to reduce the area of proposed clearing and minimise impacts to vegetation located within the Burakin - Wialki Road reserve, which was determined as having high conservation value within the Shire of Mount Marshall (RCC, 2006).

Given the distance of these conservation areas, and the small area of proposed clearing, it is unlikely that the vegetation under application provides a fauna for corridor between these areas.

The proposed clearing is not likely to be at variance to this Principle.

Methodology References:
-RCC (2006)

GIS Databases:
-DEC Tenure
-NLWRA, Extent of Vegetation Remaining

(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 closest watercourse or wetland to the application area is located approximately 1.4 kilometres south. A tributary of the Beacon River is mapped approximately 4 kilometres west of the application area.

Given the distance to hydrological features, it is unlikely that the proposed clearing will cause deterioration in the quality of surface water.

Groundwater salinity on site is mapped at 14000 to 35000 milligrams per litre (Highly saline). Despite this high salinity level, it is not likely that the proposed clearing of 0.54 hectares will lead to a perceptible rise in the watertable and thus an increase in groundwater salinity levels.

The proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Databases:
-Groundwater Salinity, Statewide
-Hydrography, linear
-Hydrography, hierachy

(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 at variance to this Principle

Given the relatively small size of the proposed clearing, flat topography on site, and low annual rainfall of the local area (400 millimetres), the proposed clearing will not cause or exacerbate the incidence or intensity of flooding.

The proposed clearing is not at variance to this Principle.

Methodology GIS Databases:
-Rainfall, Mean Annual

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

Comments

The applicant has revised the application, reducing the area of proposed clearing from 1.22 hectares to 0.54 hectares to minimise impacts to vegetation located within the Burakin - Wialki Road reserve, which was determined as having high conservation value within the Shire of Mount Marshall (RCC, 2006). The application area now includes an area designated for two truck bays near the eastern end of Burakin-Wialki Road.

The Mount Marshall Land Conservation District Committee (LCDC) has advised that they do not object to the proposed clearing (Mount Marshall LCDC, 2013).

Methodology References:
-Mount Marshall Land Conservation District Committee (2013)

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DotE (2013) Species Profile and Threats Database, *Idiosoma manigrum*, *Leipoa ocellata*, *Macrotis lagotis*, *Aganip pecastellum*, Department of the Environment, Canberra.
- DPaW (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dec.wa.gov.au/>. Accessed 18/06/2013.
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- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
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- RCC (2006) Roadside Vegetation and Conservation Values in the Shire of Trayning. Roadside Conservation Committee, Western Australia.
- 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 Bruce Rock (2013) Botanical Survey. Additional Information for CPS 5731/1. DER Ref A701029.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dec.wa.gov.au/> (Accessed October 2013).