



GOVERNMENT OF  
WESTERN AUSTRALIA

## CLEARING PERMIT

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

### PERMIT DETAILS

Area Permit Number: 6601/1  
File Number: 2011/006890-2  
Duration of Permit: From 5 September 2015 to 5 September 2017

### PERMIT HOLDER

Shire of Ravensthorpe

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 1405 on Deposited Plan 216661 (Reserve 40157), Jerdacuttup  
Speciosa Road reserve (PIN: 1291733), Jerdacuttup

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.809 hectares of native vegetation within the areas cross-hatched yellow on attached Plan 6601/1.

### CONDITIONS

#### 1. Dieback and 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* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) 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:

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

*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; and

*weed/s* means any plant -

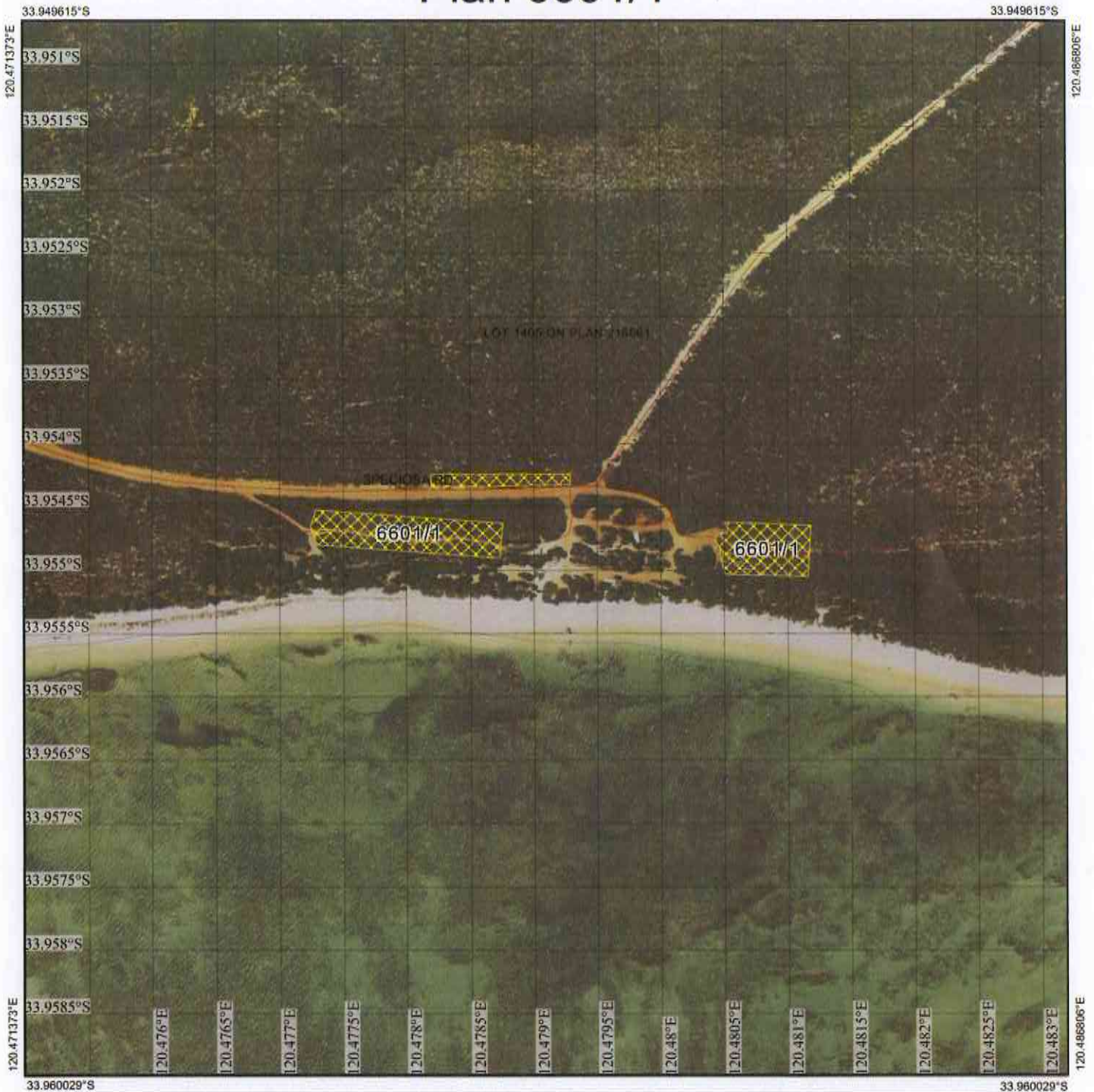
- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

M Warnock  
SENIOR MANAGER  
CLEARING REGULATION




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

6 August 2015

# Plan 6601/1



## Legend

-  Imagery
-  Clearing Instruments Activities
-  Cadastre



(Approximate when reproduced at A4)  
GDA 94 (Lat/Long)  
Geocentric Datum of Australia 1994

*M Warnock*  
Date 6/8/15  
M Warnock

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



## 1. Application details

### 1.1. Permit application details

Permit application No.: 6601/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Shire of Ravensthorpe

### 1.3. Property details

Property: Lot 1405 on Deposited Plan 216661, Jerdacuttup  
Speciosa Road reserve - 1291733, Jerdacuttup  
Local Government Authority: Shire of Ravensthorpe  
DER Region: South Coast  
DPaW District: Albany  
LCDC: Ravensthorpe  
Localities: Jerdacuttup

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.809		Mechanical Removal	Campsite, toilet block and information bay construction

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 6 August 2015

## 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 42 is described as Shrublands; mallee & acacia scrub on south coastal dunes (Shepherd et al., 2001).	The Shire of Ravensthorpe proposes to clear up to 0.809 hectares of native vegetation within Lot 1405 on Plan 216661 and Speciosa Road reserve (PIN 1291733), Jerdacuttup, for the purpose of constructing camping bays, an information bay and a toilet block.	Very Good; Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).	Vegetation condition was determined via aerial imagery and photographs provided by the applicant (Shire of Ravensthorpe, 2015).  The proposed clearing comprises three areas adjoining areas previously cleared for an existing campsite in Mason Bay, Jerdacuttup.

## 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 application area consists of 0.809 hectares of native vegetation across three areas in Mason Bay, Jerdacuttup. Photographs of the application area provided by the Shire of Ravensthorpe (2015) show that the vegetation proposed to be cleared is in very good (Keighery, 1994) condition.

A total of 68 bird, two mammal, three reptile and 28 invertebrate species have been recorded within 10 kilometres of the application area, including four threatened and one priority 4 species (Parks and Wildlife, 2007-). While some threatened and priority fauna may use habitat within the application area opportunistically, the vegetation under application is not considered to be primary foraging, shelter or breeding habitat for any of these species (Parks and Wildlife, 2015b).

The application area and surrounds are likely to support a moderate level of floristic diversity, with 174 dicotyledon, 45 monocotyledon and 2 gymnosperms recorded within 10 kilometres of the application area (Parks and Wildlife, 2007-). Of these, nine taxa are listed as priority flora (Parks and Wildlife, 2007-), of which five may have the potential to occur within the application area based on the vegetation and soil types mapped (Western Australian Herbarium, 1998-). Of these, three species are listed as priority 3 and two species are

listed as priority 4, and all have moderate to large distributions (Western Australian Herbarium, 1998- ).

The Department of Parks and Wildlife (Parks and Wildlife, 2015c) advise that habitat within the application area may be suitable for one species of rare flora. This species is known from one population comprising 12 subpopulations approximately 30 kilometres west of the application area (Parks and Wildlife, 2015c). This flora species is ranked as Critically Endangered by Parks and Wildlife, and therefore any additional occurrences of this species would be considered significant (Parks and Wildlife, 2015c). However, given that the application area occurs 30 kilometres from the nearest record of this species and is situated adjacent to previously cleared areas used for recreation, the proposed clearing is not likely to impact this species.

Vegetation within the application area and surrounds is considered to be in very good (Keighery, 1994) condition, with minimal weed cover. Clearing is proposed to be undertaken using mechanical methods, which has the potential to introduce weeds from nearby areas. Weeds can decrease the biodiversity value of an area, as they out-compete native vegetation for available resources, contribute to land degradation and increase the frequency and intensity of fires (DEC, 2011). The application area also occurs within the known distribution of dieback (*Phytophthora cinnamomi*). Potential impacts to biodiversity within and nearby the application area as a result of the proposed clearing may be minimised by the implementation of weed and dieback management practices.

There is one Federally Threatened Ecological Community (TEC) within the application area. This TEC, 'Proteaceae Dominated Kwongan Shrubland' is listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), and is considered to be a Priority 3 Ecological Community by Parks and Wildlife. The proposed clearing represents 0.00001 per cent of the estimated distribution for this TEC, which occurs across much of the southern coastline of Western Australia (Department of the Environment, 2014). The proposed clearing is not likely to impact the security of this ecological community. There are no further TECs or Priority Ecological Communities mapped within 20 kilometres of the application area.

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

**Methodology** Keighery (1994)  
DEC (2011)  
Department of the Environment (2014)  
Parks and Wildlife (2007-)  
Parks and Wildlife (2015a)  
Parks and Wildlife (2015b)  
Parks and Wildlife (2015c)  
Shire of Ravensthorpe (2015)  
Western Australian Herbarium (1998-)

GIS Database:  
- Pre-European vegetation  
- Threatened and Priority Ecological Communities (TECPEC) - Buffers  
- Threatened and Priority Flora

**(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 application area comprises three areas located adjacent to an existing campground. Vegetation within the application area represents Acacia-mallee shrubland habitat. According to aerial imagery, this habitat is of a similar type to that surrounding the application area, which appears to be unfragmented and relatively undisturbed.

Acacia-mallee shrubland habitat may be utilised for foraging by Carnaby's cockatoo (*Calyptorhynchus latirostris*) and Baudin's cockatoo (*Calyptorhynchus baudinii*), both of which are listed as Schedule 1 (Threatened) under the *Wildlife Conservation Act 1950* (WC Act). Parks and Wildlife (2015b) advise that use of habitat within the application area by these species is likely to be opportunistic, and is not considered to comprise significant foraging habitat for black cockatoos.

Based on the availability of extensive, good quality habitat outside the application area, and the location of the proposed clearing amongst previously cleared areas, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** Parks and Wildlife (2015b)  
GIS Database:  
- Imagery  
- Pre-European 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 likely to be at variance to this Principle**  
No rare flora have been recorded within 10 kilometres of the application area (Parks and Wildlife, 2007-). However, habitat within the area proposed to be cleared may be suitable for a species of rare flora ranked as Critically Endangered by Parks and Wildlife. This species has been recorded across one population comprising 12 subpopulations approximately 30 kilometres west of the application area, in association with Mallee shrubland and woodland on consolidated dunes (Parks and Wildlife, 2015c). However, given the distance from the nearest record of this species and the location of the application area adjacent to previously cleared areas, the proposed clearing is not likely to impact this species.

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

**Methodology** Parks and Wildlife (2007-)  
Parks and Wildlife (2015c)

GIS Database:  
- Threatened and Priority Flora

**(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**  
Based on available databases, there are no Threatened Ecological Communities (TECs) within 10 kilometres of the application area. Vegetation within the application area is not considered to represent any state listed TEC.

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

**Methodology** GIS Database:  
- Threatened and Priority Ecological Communities (TECPEC) - Buffers

**(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 at variance to this Principle**  
The application area is located within the Esperance Plains Interim Biogeographic Regionalisation of Australia (IBRA) bioregion, in which approximately 52 per cent of the pre-European vegetation remains (see table below) (Government of Western Australia, 2014).

The vegetation within the application area has been mapped as Beard vegetation association 42. Over 90 per cent of this Beard vegetation association remains at a bioregional level (Government of Western Australia, 2014). Further, the Shire of Ravensthorpe is extensively vegetated and retains approximately 62 per cent of its pre-European vegetation extent. Therefore, the area proposed to be cleared does not represent a significant remnant of native vegetation within an area that has been extensively cleared.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DPaW Managed Lands (%)
IBRA Bioregion* - Esperance Plains	2,899,941	1,495,049	52	55
Shire* - Shire of Ravensthorpe	982,194	605,475	62	32
<b>Beard Vegetation Association in Bioregion*</b>				
42	135,420	128,052.64	95	57

\* Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Parks and Wildlife, Perth.

Based on the above, the proposed clearing is not at variance to this Principle.

**Methodology** Government of Western Australia (2014)

GIS Database:  
- Imagery  
- Pre-European 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**  
Vegetation within the application area is mapped as 'shrublands; mallee and acacia scrub on south coastal

dunes' (Shepherd et al., 2001).

There are no watercourses within or near to the application area. Therefore, vegetation proposed to be cleared is not considered to be riparian in nature.

Based on the above, the proposed clearing is not at variance to this Principle.

**Methodology** Shepherd et al. (2001)

GIS Database:

- Hydrography, linear
- Pre-European vegetation

**(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**

Soils within the application area comprise coastal dunes of calcareous sands (Northcote et al., 1960-68). While areas cleared for toilet block and information bay construction will be covered by permanent infrastructure following clearing, campsites will be exposed and may therefore be susceptible to wind erosion during dryer periods of the year. However, due to the limited area of clearing (0.809 hectares), any soil erosion will be highly localised and is not likely to cause appreciable land degradation.

The application area is located on a slight slope from 10 metres to 5 metres above sea level. Given the absence of steep topography, the proposed clearing is not likely to exacerbate water erosion during periods of rainfall.

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

**Methodology** Northcote et al. (1960-68)

GIS Database:

- Soils, statewide

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

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

The proposed clearing is located approximately 900 metres south of the Jerdacuttup Lakes Nature Reserve, which is an A Class reserve for the purpose of conserving flora and fauna. The application area does not form a linkage between this nature reserve and other vegetated areas. From this distance, it is unlikely that the clearing of 0.809 hectares of native vegetation will impact the environmental values of this conservation area.

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

**Methodology** GIS Database:  
- DPaW Tenure

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

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

There are no watercourses within or surrounding the application area. The proposed clearing is therefore highly unlikely to cause deterioration in the quality of surface water.

Groundwater salinity within the area under application is estimated to be between 7 - 14,000 milligrams/Litre Total Dissolved Solids. The proposed clearing activity is not likely to significantly alter salinity levels within or outside the application area.

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

**Methodology**

**(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 application area comprises 0.809 hectares of native vegetation over highly permeable sandy soils. Hopetoun experiences approximately 495 millimetres of annual rainfall (BoM, 2015), and has an annual evapotranspiration rate of 500 millimetres. As a result, there is likely to be little surface water during periods of normal seasonal rain. The proposed clearing is not likely to lead to an increase in the incidence or intensity of flooding.

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

**Methodology** BoM (2015)  
GIS Database:  
- Evapotranspiration, Area Actual

#### **Planning instruments and other relevant matters.**

**Comments** The application area occurs within the South Coast EPA Red Book Area 1976-91. This Red Book Area is noted for the presence of the Esperance sandplains and its associated ecosystems, which is one of the most extensive sandplains in south Western Australia (EPA, 1976). The EPA (1976) also acknowledges that coastal areas in this region are highly valued for recreation, which can have significant impacts on the fragile nature of coastal ecosystems. The proposed clearing is for the purpose of camping bays, toilet block and information bay construction, which may facilitate an increased recreational use of this area. Local impacts to coastal vegetation are mitigated by the small size of the proposed clearing (0.809 hectares). The location of the application area amongst previously cleared areas will reduce the edge effects associated with clearing.

No Aboriginal Sites of Significance have been recorded within the area under application.

The clearing permit application was advertised on 15 June 2015 by the Department of Environment Regulation inviting submissions from the public. There were no submissions received.

**Methodology** EPA (1976)  
  
GIS Databases:  
- Aboriginal Sites Register System  
- EPA Red Book 1976-91

#### **4. References**

- BoM (2015) Climate statistics for Hopetoun North. Australian Bureau of Meteorology. URL: [http://www.bom.gov.au/climate/averages/tables/cw\\_009961.shtml](http://www.bom.gov.au/climate/averages/tables/cw_009961.shtml). Accessed June 2015.
- DEC (2011) Invasive Plant Prioritisation, Department of Environment and Conservation, Perth.
- Department of the Environment (2014) Proteaceae Dominated Kwongkan Shrubland: a nationally-protected ecological community. Department of the Environment, Canberra.
- EPA (1976) Conservation Reserves for Western Australia as Recommended by the Environmental Protection Authority 1976: Systems 1,2,3,5. Environmental Protection Authority, Perth.
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Parks and Wildlife, Perth.
- 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.
- Parks and Wildlife (2007-) Naturemap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed June, 2015.
- Parks and Wildlife (2015a) Advice received from Parks and Wildlife on 13 February 2015, Department of Parks and Wildlife. (DER REF: A873800).
- Parks and Wildlife (2015b) Advice received from Parks and Wildlife on 16 July 2015, Department of Parks and Wildlife. (DER REF: A938105).
- Parks and Wildlife (2015c) Advice received from Parks and Wildlife on 13 July 2015, Department of Parks and Wildlife. (DER REF: A938118).
- 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.
- Shire of Ravensthorpe (2015) Further information provided to the assessing officer on 25 June 2015. DER REF: 930141.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> Accessed June 2015.