

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number: CPS 5136/1

Permit Holder: Shire of Mundaring

Duration of Permit: 7 December 2012 - 7 December 2014

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 construction, maintenance and drainage.

2. Land on which clearing is to be done

Lot 69 on Deposited Plan 223133 Greenmount 6056 Lot 8996 on Deposited Plan 241716 Parkerville 6081 Lot 10159 on Deposited Plan 215030 Hovea 6071 Darkan Street road reserve (Mundaring 6073) PIN 11864298 Throssell Road road reserve (Greenmount 6056) PIN 11841083 Brooking Road road reserve (Parkerville 6081) PIN 11419749 Victoria Road road reserve (Parkerville 6081) PIN 11837554 Victoria Road road reserve (Hovea 6071) PIN 11418632

3. Area of Clearing

The Permit Holder must not clear more than 0.65 hectares of native vegetation within the area hatched yellow on attached Plan 5136/1a, Plan 5136/1b and Plan 5136/1c.

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.

6. 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

7. 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:

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

8. 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) shall only move soils in dry conditions;
- (c) ensure that no dieback or weed-affected soil, mulch, fill or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

9. Fauna management

- (a) Prior to undertaking any clearing within the area cross-hatched yellow on Plan 5136/1b authorised under this Permit, the area shall be inspected by a *fauna specialist*, for the presence of *Isoodon obesulus fusciventer* (Quenda; Southern Brown Bandicoot).
- (b) Within 24 hours prior to undertaking any clearing within the area cross-hatched yellow on Plan 5136/1b authorised under this Permit, the Permit Holder shall engage a *fauna clearing* person to remove and relocate fauna identified under condition 9(a).

10. Fauna management - habitat trees

- (a) Prior to undertaking any clearing authorised under this Permit, the areas shall be inspected by a *fauna specialist* who shall identify *habitat tree(s)* suitable to be utilised as habitat by fauna listed in the *Wildlife Conservation (Specially Protected Fauna) Notice*.
- (b) Prior to clearing, any habitat tree(s) identified by condition 10(a) shall be inspected by a fauna specialist for the presence of fauna listed in the Wildlife Conservation (Specially Protected Fauna) Notice.
- (c) Where fauna are identified in relation to condition 10(b) of this Permit, the Permit Holder shall ensure that:
 - (i) no clearing of the identified habitat tree(s) occurs, unless approved by the CEO;
 - (iii) where fauna are identified in relation to conditions 10(b) of this Permit, the Permit Holder shall ensure that no taking of identified fauna occurs unless approved by the CEO.

11. Records to be kept

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

- (a) In relation to fauna management pursuant to condition 9 of this Permit:
 - (i) the location of each Isoodon obesulus fusciventer recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees; and
 - (ii) the location and date where relocated fauna was released, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees.
- (b) In relation to fauna management pursuant to condition 10 of this Permit:
 - the location of each habitat tree identified recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) the species name of fauna reasonably likely to utilise, or that have been observed utilising, the habitat tree(s); and
 - (iii) a copy of the fauna specialist's report.

12. Reporting

- (a) The Permit Holder must provide to the CEO on or before 1 July of each year, a written report:
 - (i) of records required under condition 11 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 July to 30 June of the preceding financial year.
- (b) Prior to 7 September 2012, the Permit Holder must provide to the CEO a written report of records required under condition 11 of this Permit where these records have not already been provided under condition 12(a).

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;

fauna clearing person means a person who has obtained a licence from the Department, issued pursuant to the Wildlife Conservation Regulations 1970 authorising them to take fauna;

fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

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

habitat tree(s) means trees that have a diameter, measured at 1.5m above the ground, of 50cm or greater, healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts;

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 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.

Wildlife Conservation (Specially Protected Fauna) Notice means those fauna taxa gazetted as rare fauna pursuant to section 14(4)(a) of the Wildlife Conservation Act 1950 (as amended

M Warnock

MANAGER, COMPLIANCE AND AUDIT SECTION NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20 of the Environmental Protection Act 1986

15 November 2012

Plan 5136/1 a





Clearing Instruments

Areas Approved to Clea Road Centrelines
Cadastre for labelling

Perth Metropolitan North 29cm Orthomosaic - Landgate 2009



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 injecuracies.

ACC.

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 acknowleged by the agency acronym in the legend,



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Plan 5136/1 b



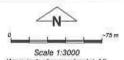


Clearing Instruments

Areas Approved to Clear **Road Centrelines**

Cadastre for labelling

Perth Metropolitan North 20cm Orthomosaic - Landgate



Geocentric Datum Australia 1994

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

M Warnock

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

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Plan 5136/1 c



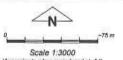


Clearing Instruments

Areas Approved to Clear Road Centrelines

Cadastre for labelling

Perth Metropolitan North 20cm Orthomosaic - Landgate



Geocentric Datum Australia 1994

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

information derived from this map should be confirmed with the data custodian acknowleged by the agency acronym in the legend,



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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.:

5136/1

Permit type:

Purpose Permit

1.2. Proponent details

Proponent's name:

Shire of Mundaring

1.3. Property details

Property:

ROAD RESERVE (HOVEA 6071)

ROAD RESERVE (PARKERVILLE 6081)

LOT 8996 ON PLAN 241716 (PARKERVILLE 6081)

ROAD RESERVE (MUNDARING 6073)

LOT 3040 ON PLAN 36439 (MUNDARING 6073)

ROAD RESERVE (GREENMOUNT 6056)

LOT 69 ON PLAN 223133 (Lot No. 69 BURTON GREENMOUNT 6056)

LOT 10159 ON PLAN 215030 (Lot No. 10159 GREAT EASTERN HOVEA 6071)

Shire of Mundaring

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)

0.44

80.0

0.13

No. Trees

Method of Clearing Mechanical Removal

Mechanical Removal

Mechanical Removal

For the purpose of:

Road construction or maintenance Road construction or maintenance Road construction or maintenance

1.5. Decision on application

Decision on Permit Application:

Decision Date:

Grant

15 November 2012

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Beard Vegetation Association: 3 - medium forest; jarrah-marri.

Beard Vegetation Association: 4 - medium woodland; marri & wandoo.

(Shepherd et al, 2001)

Mattiske Vegetation Complex: D2 - open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on lateritic uplands in subhumid and semiarid zones.

Mattiske Vegetation Complex: Ds - low woodland of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Eucalyptus staeri on small hills of siltstone plateau in the perhumid zone.

Clearing Description

The application is to clear 0.65 hectares of native vegetation within Lot 3040 on Deposited Plan 36439 and Darkan Street road reserve, Mundaring, Lot 69 on Deposited Plan 223133 and Throssell Road reserve, Greenmount, Lot 8996 on Deposited Plan 241716, Brooking Road reserve and Owen Road reserve, Parkerville, Lot 10159 on Deposited Plan 215030 and Victoria Road reserve, Hovea. The application is split across three different sites, which range in vegetation type and condition.

The Darkan Street application area falls mostly within a road reserve however a portion of the vegetation is within the Beelu National Park. The vegetation in this area is in very good (Keighery, 1994)

Vegetation Condition

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)

To

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)

Comment

The condition of the vegetation under application was determined using aerial imagery (Perth Metropolitan North 20cm Orthomosaic - Landgate 2009) and information from a site visit conducted by Department fo Environment and Conservation (DEC, 2012).

Mattiske Vegetation
Complex: Yg1 - open
forest of Eucalyptus
marginata subsp.
marginata-Corymbia
calophylla on slopes with
mixtures of Eucalyptus
patens and Eucalyptus
megacarpa on the valley
floors in humid and
subhumid zones (Mattiske
and Havel, 1980).

condition and is mapped Eucalyptus marginata and Corymbia calophylla forest.

The Brooking Road application area is within a road reserve, with the same vegetation type as Darkan Street however it is in a degraded (Keighery, 1994) condition.

The Throssell Road application area falls partly within a road reserve and partly within the John Forrest National Park. The vegetation in the adjoining park is in very good to excellent (Keighery, 1994) condition whilst that under application is in a degraded (Keighery, 1994) condition. The vegetation consists of Corymbia calophylla and Eucalyptus wandoo woodland. The northern end of the application area (0.04ha) is within the buffer of the Central Northern Darling Scarp Granite Shrubland Community, a priority ecological community.

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 to clear 0.65ha of native vegetation within various road reserves and conservation estate in the Shire of Mundaring is for the purpose of road construction, realignment and drainage.

The majority of Darkan Street application area (0.13ha) falls within an un-developed road reserve, however it is mostly void of vegetation due to historical use as an access track. A small portion of the application area (0.003ha) falls within the Beelu National Park and is also void of vegetation. The Brooking Road application area (0.4ha) is in a degraded (Keighery, 1994) condition and consists of marri and jarrah trees. The vegetation under application at both sites is unlikely to be an area of high biodiversity as the vegetation type is well represented in the local area (10km), with approximately 50 per cent native vegetation remaining.

The Throssell Road application area (0.08ha) is for the reconstruction of Throssell Road and reconstruction of two drainage basin outlets (0.004ha). The road reconstruction falls within the road reserve, however the majority of the drainage works fall along the boundary of John Forrest National Park (JFNP). A site inspection of the Throssell Road application area (DEC, 2012b) found the vegetation in the vicinity of the two drainage areas to be in very good to excellent condition (Keighery, 1994). This area is also within the mapped buffer of the Central Northern Darling Scarp Granite Shrubland Community, a priority ecological community (PEC). There are records of 37 priority listed flora species and 7 species of rare flora within the local area (10km radius), many of which occur in rocky granite outcrop habitat and therefore may be present within the above mentioned PEC. Given this fact, and because the drainage works may increase the risk of weed dispersal and pollutant into the adjoining JFNP, the applicant has agreed to reduce the amount of clearing required and modify the proposed drainage works to avoid impacting vegetation within JFNP (DEC, 2012a).

Weed and dieback management practices will be required to mitigate impacts to the adjoining JFNP.

Given the above and the small amount of proposed clearing at each previously disturbed site, the proposed clearing is not likely to be at variance to this principle.

Methodology

References:

- DEC, (2012a and 2012b)
- Keighery, (1994)

GIS Datasets:

- Perth Metropolitan North 20cm Orthomosaic - Landgate 2009

- SAC Biodatasets
- Threatened Ecological Sites Buffered
- (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 may be at variance to this Principle

There are records of seven fauna species listed as ?rare or likely to become extinct? (Wildlife Conservation Act 1950) within the local area (10km radius) including confirmed Carnaby's Cockatoo (Calyptorhynchus latirostris) breeding and roosting areas.

Of the three application areas, only the Brooking Road area contains any potential fauna habitat. There are potential habitat trees which may support indigenous fauna and habitat for the ground dwelling Quenda (a priority four listed fauna species). Appropriate fauna management practices will assist in mitigating any potential impact to this species and to habitat trees.

Given that approximately 50 per cent of native vegetation remains within the local area and that the three application areas occur within or adjacent to large intact remnants of vegetation that are likely to contain similar habitats, it is not considered the small area of vegetation proposed to be cleared (0.65ha over three areas) to contain significant fauna habitat.

Given the presence of habitat trees and Quenda habitat the proposed clearing may be at variance to this principle.

Methodology GIS Datasets:

- Carnabys Cockatoo Breeding Areas Confirmed
- Carnabys Cockatoo Roost Areas Confirmed
- 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

The closest record of rare flora to the Darkan Street application area is an Acacia species, which has been mapped 2km to the south west. The Acacia species is also 3km to the east of the Brooking Road application area.

The Acacia species occurs within the same soil type as the areas under application, however the application areas do not provide suitable habitat for this species as it grows in crevices of granite outcrops (Western Australian Herbarium, 1998) which are not present within the boundary of the application areas.

The closest record of rare flora to the Throssell Road application area is an Anthocercis species, mapped 2km to the north-east. It has been recorded within the same soil and vegetation type and similarly to the Acacia species, it grows in association with granite outcrops (Western Australia Herbarium, 1998). The small and previously disturbed area associated with the existing drainage works does not provide any suitable habitat for this species. The applicant has agreed to modify the proposed drainage works to avoid impacting vegetation within the national park (DEC, 2012a).

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

Methodology

References:

- DEC, (2012a)
- Western Australian Herbarium, 1998

GIS Datasets:

- SAC Biodatasets
- Soils, statewide
- (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

The Throssell Road application area is 2.5km from a mapped threatened ecological community - Eucalyptus calophylla/Xanthorrhoea preisii woodlands and shrublands - classified as critically endangered.

Urban development separates the threatened ecological community from the application area. Given the distance, the urban separation and the small size of the area to be cleared, the vegetation under application is unlikely to be necessary for the maintenance of the threatened ecological community.

Therefore the clearing under application is not likely to be at variance to this principle.

Methodology

GIS Datasets:

- SAC Biodatasets
- Threatened Ecological Sites Buffered

(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 mapped as Beard vegetation association 3 and 4 of which there is approximately 69% and 29% of pre-European extent remaining respectively (Government of Western Australia 2011). The Mattiske Vegetation Complexes that occur within the area under application D2, Ds and Yg1 have 85%, 69% and 83% of vegetation extent remaining within the Jarrah Forest Bioregion.

The Beard vegetation associations retain more than the threshold level (30%) recommended in the National Objectives Targets for Biodiversity Conservation, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

In addition, the application areas do not occur within an extensively cleared landscape as approximately 50% remains in the local area (10 km radius) and 67% remaining in the Shire of Mundaring. Therefore, the proposal is not likely to be at variance to this principle.

	Pre-European	Current Extent Remaining		Extent in DEC Managed Lands
	(ha)	(ha)	(%)	(%)
IBRA Bioregion*				
Jarrah Forest	4,506,656	2,473,559	54.9	67.9
Shire*				
Shire of Mundaring	64,377	43,407	67.4	51.6
Beard Vegetation Associa	tion in Bioregion*			
3	2,390,591	1,641,271	68.7	79.7
4	1,022,712	293,207	28.7	22.2
Mattiske Vegetation Comp	olex **			
D2	86,087	73,632	85.5	69.7
Ds	3,035	2,105	69.4	33
Yg1	80,061	67,068	83.8	75.6

^{*} Government of Western Australia (2011).

Methodology

References:

- Government of Western Australia, (2011)
- Shepherd (2007)
- -Commonwealth of Australia (2001)

GIS Datasets:

- -Pre-European vegetation
- -NWLRA, Vegetation Extent

(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 application area or close enough to be affected by the clearing, therefore it is not likely to be at variance to this principle.

Methodology

GIS Datasets:

- Hydrography, linear DOW

(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 soil type found in the areas under application is characterised mainly by acid red earths, ironstone gravel, lateritic gravels and block laterite, featuring rocky outcrops (Northcote et al. 1960-68).

The topography is gently undulating and the annual rainfall is moderate.

^{**} Shepherd (2007)

The areas under application are fragmented and small in size (0.4ha being the largest area in one location) and surrounded by either forest vegetation in very good to excellent condition (Keighery, 1994) or residential housing.

Considering the above, clearing the area under application is not likely to result in appreciable land degradation and is therefore not likely to be at variance to this principle.

Methodology

References:

- Keighery, (1994)
- Northcote et al, (1960-68)

GIS Datasets:

- Rainfall, Mean Annual
- Soils, statewide
- 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 may be at variance to this Principle

A small portion of the Darkan Street application area falls within Beelu National Park and a part of the Throssell Road application area falls within the John Forrest National Park.

To mitigate the potential of weed and dieback dispersal, weed and dieback hygiene management measures will be required.

Considering the above, the clearing under application may be at variance to this principle.

Methodology

References:

-DEC, (2012b)

GIS Datasets:

- DEC 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

The proposed clearing at each site is small (less than 0.5ha) and unlikely to have any impact upon groundwater. Road and drainage design, including the construction of culverts, will mitigate any potential erosion problems.

The clearing proposal is not likely to be at variance to this principle.

Methodology

GIS Datasets:

- CAWSA Part IIA Clearing Control Catchments
- Public Drinking Water Source Areas (PDWSA's)
- RIWI Act, Areas

(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

There are no watercourses or wetlands within the application area or close enough to be affected by the clearing.

Due to the small size of application areas and the absence of watercourses in close proximity, the proposed clearing is unlikely to be at variance to this principle.

Methodology

GIS Datasets:

- Hydrography, linear DOW
- Topographic Contours, Statewide

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

Comments

The application area falls within Mundaring Weir Metro Catchment Area, a priority 1 Public Drinking Water Source Area. It is also within Swan River System Surface Water Area, under control of the Rights in Water and Irrigation Act 1914.

The Darkan Street application area falls within Mundaring Weir Catchment Area, a zone B Country Area Water

Supply designation.

Brooking Road and Throssell Road application areas are within the Darling Range Aboriginal Site of Significance. The Throssell Road area is also within Greenmount; and Blackadder and Woodbridge Creek Aboriginal Sites of Significance. It is the proponent's responsibility to ensure they comply with the Aboriginal Heritage Act 1972.

Under the Town Planning Scheme the application area is zoned as Road Reserve, Urban and Parks and Recreation.

Approval to clear within John Forest National Park and Beelu National Park has been obtained from Regional Manager, Department of Environment and Conservation, Swan Region and the Conservation Commissioner (DEC, 2012a and 2012c).

Methodology

References:

- DEC (2012a and 2012c)

GIS databases:

- Aboriginal Sites of Significance

- CAWSA Part IIA Clearing Control Catchments
- Public Drinking Water Source Areas (PDWSA's)
- RIWI Act. Areas
- Town Planning Scheme Zones

4. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra. DEC (2012a) Regional advice from DEC's Perth Hills District regarding CPS 5136/1 (DEC Ref: A536540 and A566188). DEC (2012b) Species and Communities Branch for Clearing Permit Application CPS 5136/1, Throssell Road reserve, Greenmount. Site inspection undertaken 07/08/2012. Department of Environment and Conservation, Western Australia (DEC Ref: A532876).

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Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.

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Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249.

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5. Glossary

Term Meaning BCS Biodiversity Coordination Section of DEC Department of Conservation and Land Management (now BCS) CALM DAFWA Department of Agriculture and Food Department of Environment and Conservation DEC Department of Environmental Protection (now DEC) DEP Department of Environment DOE Department of Industry and Resources DolR Declared Rare Flora DRF EPP Environmental Protection Policy Geographical Information System GIS Hectare (10,000 square metres) ha Threatened Ecological Community TEC Water and Rivers Commission (now DEC) WRC