



**1. Application details**

**1.1. Permit application details**

Permit application No.: 3158/1  
 Permit type: Area Permit

**1.2. Proponent details**

Proponent's name: Filomena Ditri

**1.3. Property details**

Property:  
 LOT 9951 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 9951 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 9952 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 9952 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 9953 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 9953 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 9955 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 9955 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 11140 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 11140 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 9954 ON PLAN 203883 ( BOORARA BROOK 6262)  
 LOT 9954 ON PLAN 203883 ( BOORARA BROOK 6262)

Local Government Area: Shire Of Manjimup

Colloquial name:

**1.4. Application**

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
80		Mechanical Removal	Grazing & Pasture

**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
Vegetation Association 1144 Tall forest; karri & marri (Corymbia calophylla) Shepherd (1980)  Mattiske (1998) - COLLIS 1 (COy1): Tall open forest to woodland of Eucalyptus marginata subsp. marginata - Corymbia calophylla (Marri) - Banksia grandis (Bull Banksia) - Allocasuarina fraseriana (Sheoak) on low hills and with Allocasuarina decussata (Karri Sheoak) on slopes in perhumid and humid zones. - GRANITE VALLEYS (Vh2): Tall open forest of Eucalyptus diversicolor (Karri) - Eucalyptus patens (Blackbutt) on slopes with Agonis flexuosa (Peppermint) - Allocasuarina decussata (Karri Sheoak) -	The vegetation is considered to be in a very good (Keighery, 1994) condition and is described as being a closed forest dominated by Marri, Jarrah and Karri. The southern section of the application area is comprised of an even aged Karri stand (approximately 50 years old), with few mature trees. The eastern and northern sections contain mature Marri and Jarrah trees. The middle storey is comprised of Sheoak, peppermint and Karri wattle. There is some evidence of disturbance as a result of gazing activities and past logging operations (DEC, 2009).  All forested areas are not fenced and livestock have grazed through all areas for the past 30 years. The southern area has not been burnt for more than 30 years, however a wildfire	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The description and condition of the vegetation under application was determined via the use of aerial mapping systems and a DEC conducted site inspection.

Callistachys lanceolata (Wonnich) on valley floors in hyperhumid and perhumid zones.

- BROAD SWAMPS (S4): Low woodland of Eucalyptus marginata subsp. marginata (Jarrah) - Nuytsia floribunda (WA Christmas Tree) with some Melaleuca preissiana (Moonah) and closed heaths of Myrtaceae spp. on broad drainage lines in hyperhumid and perhumid zones.

- COLLIS (COB): Tall open forest of Eucalyptus diversicolor (Karri) - Corymbia calophylla (Marri) on crests of hills arising above the southern coastal plain in the hyperhumid zone.

went through the northern and eastern sections of the applied area. The eastern most part of the application area was harvested for Jarrah sawlogs approximately 10 years ago but has since regenerated (DEC, 2009).

### 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 is considered to be in a very good (Keighery, 1994) condition and is described as being a closed forest dominated by Marri, Jarrah and Karri (DEC 2009a). The southern section of the application area is comprised of an even aged Karri stand (approximately 50 years old), with few mature trees. The eastern and northern sections contain mature Marri and Jarrah trees. The middle storey is comprised of Sheoak, peppermint and Karri wattle. There is some evidence of disturbance as a result of gazing activities and past logging operations, all forested areas of the applied area are not fenced and livestock have grazed through all areas for the past 30 years. Wildfire has been through the eastern and northern areas, however the southern area has not been burnt for more than 30 years (DEC, 2009a).

Upon inspection by a DEC flora officer during a DEC conducted site inspection, the priority 3 species *Lomandra ordii* was identified within the application area. A further 20 species were recorded within the local area (10km radius) (see list below for all species). This species is found with along river banks (DEC, 2009c) and was found in the most eastern section of the proposed cleared area. It is also expected to be present in association with riparian zones in the northern parts of the applied area (DEC, 2009a). The applicant has advised that given the steep terrain of the watercourse, the area encompassing riparian vegetation is unsuitable for agriculture and would maintain a vegetated buffer to the Gardiner River (DEC TRIM Ref: DOC94222). There are also four first order watercourses that dissect the application area. The Warren Catchments Council has identified all areas of riparian need protection from further clearing (Warren Catchments Council 2007 - 2011).

Three Priority Ecological Communities (PECs) have been recorded within the local area (10km radius). The proposed clearing does not occur within the buffer protecting these PECs and no PECs or Threatened Ecological Communities (TECs) were observed during the site inspection within the applied area (DEC, 2009a).

The local area is well vegetated with approximately 70% of native vegetation remaining. The Beard and Matiske vegetation types that are mapped as occurring within the application area are well represented, having remaining percentages of pre-European levels above the recommended 30% threshold required to maintain biodiversity (EPA, 2000).

Due to the presence of riparian vegetation, that is suitable habitat for *Lomandra ordii* (DEC 2009c) and the large amount of priority listed flora within the local area the proposed clearing may be at variance to this principle. It is recommended that a flora survey be undertaken at the appropriate time of year, prior to any clearing taking place (DEC, 2009d). The applicant has not advised as to whether a flora survey will be undertaken.

The following Priority flora species were recorded within a 10km radius of the application area:

- Actinotus sp. Walpole (J.R. Wheeler 3786) P3
- Amperea protensa P3
- Asplenium aethiopicum x 6 P4
- Caladenia plicata P4
- Calymperastrum latifolium x 2 P2
- Chamelaucium floriferum subsp. diffusum P2

- *Chamelaucium floriferum* subsp. *Floriferum* P3
- *Cyathochaeta stipoides* P3
- *Degelia flabellate* x 2 P2
- *Gonocarpus pusillus* P3
- *Gonocarpus simplex* P3
- *Hemigenia rigida* x 3 P1
- *Hypocalymma cordifolium* subsp. *Minus* P4
- *Leucopogon tamariscinus* P4
- *Lomandra ordii* x 2 P3
- *Meeboldina crassipes* x 3 P3
- *Meeboldina thysanantha* P3
- *Pertusaria trachyspora* P2
- *Sphenotoma parviflora* x 3 P3
- *Stylidium leeuwinense* x 13 P3
- *Tyrbastes glaucescens* P4

**Methodology** DEC (2009a)  
 DEC (2009c)  
 DEC (2009d)  
 EPA (2000)  
 Keigery (1994)  
 GIS DataSets:  
 - CALM Managed Lands and Waters - CALM 01/06/05  
 - SAC Biodatasets - accessed 6 July 09  
 - Mattiske Vegetation (01/03/1998)  
 - Pre European Vegetation - DA 01/01  
 - Clearing Regulations, Environmentally Sensitive Areas 30 May 2005  
 - NLWRA, Current Extent of Native Vegetation 20 Jan 2001

**(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 at variance to this Principle**  
 The following fauna species have been recorded within the local area (10km radius) :  
 - Little Bittern (*Ixobrychus minutus*) P4  
 - *Fibulacamptus bisetosus* P2  
 - *Calamoecia elongate* P1  
 - *Daphnia occidentalis* P1  
 - Black-stripe Minnow (*Galaxiella nigrostriata*) P3  
 - Western Mud Minnow (*Galaxiella munda*) VU  
 - Pouched Lamprey (*Geotria australis*) P1  
 - Balston's Pygmy Perch (*Nannatherina balstoni*) VU

The freshwater invertebrates (*Calamoecia elongate*, *Daphnia occidentalis* & *Fibulacamptus bisetosus*) and the Pouched Lamprey, Balston's Pygmy Perch, Western Mud Minnow and the Black-stipe Minnow may be impacted by clearing related activities as the Gardiner River (A third order watercourse) is within the north eastern boundary of the application area and an increase in sediment concentration in this watercourse may adversely affect these species and have further negative implications downstream. There are also four first order watercourses that dissect the application area. The applicant advised DEC staff that riparian vegetation along the Gardiner River will not be cleared, however, as identified by the Warren Catchment Council (2007 - 2011) all areas of riparian will need protection from further clearing.

The local area is well vegetated with approximately 70% of native vegetation remaining with a large proportion of this being protected in the form of DEC managed lands. The proposed clearing will not impact on any linkages in the local area.

A DEC conducted site inspection (DEC, 2009a) noted that there are sections of the application area where potential habitat exists for both the Baudin's Black Cockatoo (*Calyptorhynchus baudinii*- Vulnerable) and Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii* - Vulnerable). While Carnaby's Black Cockatoo (*Calyptorhynchus latirostris* - Vulnerable) has not been recorded in the local area (10km radius) it may be occurring within the application area as their known range is constantly expanding (DEC, 2009b). The applicant advised that there has been no evidence to cockatoo nesting on the property over the last 20 years (DEC TRIM Ref: DOC94222), however some cockatoo species are cryptic and may not be easily located (DEC, 2000e).

Given the suitability of the vegetation under application as Cockatoo habitat / feeding grounds, the proposed clearing is considered to be at variance to this principle.

**Methodology** DEC (2009a)

DEC (2009b)  
DEC (2009e)  
Warren Catchments Council (2007 - 2011)  
- CALM Managed Lands and Waters - CALM 01/06/05  
- Matiske Vegetation (01/03/1998)  
- SAC Biodatasets - accessed 6 July 09

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

**Comments Proposal may be at variance to this Principle**

The vegetation is considered to be in a very good (Keighery, 1994) condition and is described as being a closed forest dominated by Marri, Jarrah and Karri (in the southern area). The middle storey is comprised of Sheoak, peppermint and Karri wattle. There is some evidence of disturbance as a result of gazing activities and past logging operations (DEC, 2009a).

The local area is well vegetated with approximately 70% of native vegetation remaining. The Beard and Matiske vegetation types that are to be cleared are well represented, having remaining percentages of pre-European levels above the recommended 30% threshold required to maintain biodiversity (EPA, 2000).

The following Rare flora species were recorded within a 10km radius of the application area:

- Kennedia glabrata x 6
- Meziella trifida x 7
- Reedia spathacea x 4
- Rhacocarpus rehmannianus subsp. Webbianus x 4

Upon inspection by a DEC flora officer during a DEC conducted site inspection, none of the above mentioned flora species were identified as occurring within the application area (DEC, 2009a). However one or more of the rare flora species listed above have the potential to occur within the application area. Given this potential, it is recommended that a flora survey be conducted at the appropriate time of year, prior to any clearing taking place (DEC, 2009d). The applicant has not advised as to whether a flora survey will be undertaken, however they have noted that an increase buffer around riparian zones to protect priority and rare flora species that occur within the vegetation would be maintained (DEC TRIM Ref: DOC94222).

The proposed clearing may be at variance to this principle.

**Methodology** DEC (2009a)  
DEC (2009d)  
EPA (2000)  
Keighery (1994)  
GIS DataSets:  
- Matiske Vegetation (01/03/1998)  
- Pre European Vegetation - DA 01/01  
- SAC Biodatasets - accessed 6 July 09  
- Soils, Statewide DA 11/99

**(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**

No Threatened Ecological Communities (TECs) are known to occur within a 10km radius of the application area. During a DEC conducted site inspection, no evidence was observed that would suggest that TECs could occur within the applied area. It was noted that due to the vegetation structure, TECs are unlikely to be found within the application area (DEC, 2009a).

**Methodology** DEC (2009a)  
GIS DataSets:  
- SAC Biodatasets - accessed 6 July 09  
- Matiske Vegetation (01/03/1998)  
- Pre European Vegetation - DA 01/01  
- 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 at variance to this Principle**

The Beard vegetation association 1144 that is mapped as occurring within the application area has approximately 82.15% (being 131 169 hectares) of its pre-clearing extent remaining within the Warren bioregion. Approximately 41.90% of this occurs within conservation estate (Shepherd et al. 2007). The four Matiske vegetation types

mapped as occurring within the applied area are well represented, the lowest having 63.91% of pre-European levels of native vegetation remaining (Mattiske, 1998). Additionally, the local area (10km radius) is well vegetated with approximately 70% of native vegetation remaining.

See the table below as a summary of the above information.

The proposed clearing is not at variance to this principle.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed Land
IBRA Bioregions*				
Warren <sup>^</sup> Shire*	835,925	675,836	80.85	N/A
Manjimup	697,359	595,561	85.40	N/A
Mattiske Vegetation Complex**				
Coy1	22,833	19,460	85.23	N/A
Vh2	9,968	8,780	88.09	N/A
S4	1,568	1,002	63.91	N/A
Cob	21,839	19,611	89.80	N/A
Beard Vegetation Association with Bioregion*				
1144	159,668	131,169	82.15	41.90

\* (Shepherd et al. 2007)  
\*\* (Mattiske Consulting 1998)

**Methodology** Mattiske (1998)  
Shepherd et al. (2007)  
GIS DataSets:  
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00  
- Local Government Authorities - DLI 8/07/04  
- Mattiske Vegetation - CALM 1/03/1998  
- Pre European Vegetation - DA 01/01  
- SAC Biodatasets - accessed 6 July 09  
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

**(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 at variance to this Principle**  
The Gardner River is within the north eastern boundary of the application area. The applicant advised DEC staff that riparian vegetation along the Gardner River (a third order watercourse) will not be cleared and a large buffer along the river front would be maintained (DEC TRIM Ref: DOC94222). There are also four first order watercourses that dissect the application area. The Warren Catchment Council has identified all areas of riparian vegetation need protection from further clearing (Warren Catchments Council 2007 - 2011) and protection for riparian zones would need to be considered (DEC, 2009a).

As the vegetation under application consists of riparian vegetation DEC, 2009a) the proposed clearing is considered to be at variance to this principle. The applicant has advised that given the steep terrain around the watercourse, it is an unsuitable area for agriculture and therefore expects that a buffer would be required adjacent to the Gardner River.

**Methodology** DEC (2009a)  
GIS DataSets:  
- CALM Managed Lands and Waters - CALM 01/06/05  
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005  
- Hydrography linear - DOW 13/7/06  
- Hydrography linear (hierarchy) - DoW 13/7/06

**(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 application area is mapped as having the soil type Tc7 (knolls and hillocks). The chief soils of the knolls and hillocks are hard, and sandy, acidic yellow mottled soils with some red earths, all frequently containing ironstone gravels. Associated are leached sands of the swampy plains that vary in size from narrow drainage-ways to plains on which only a few hillocks occur (Northcote et al. 1960 -1968). During a DEC conducted site inspection no evidence was observed to suggest that the area is subject to inundation or salinity (DEC, 2009a).

Due to the presence of gravel in the soil the risk of waterlogging is considered to be low. The application area is situated at a relatively low elevation (ranging from 30-85 metres) in the landscape and a large amount of vegetation remains in the local area (10km radius), reducing the risk of wind erosion.

The proposed clearing is unlikely to cause appreciable land degradation.

- Methodology** DEC (2009a)  
Northcote et al. (1960 -1968)  
GIS DataSets:
- Average Annual Rainfall Isohyets - WRC 29/09/98
  - Annual Evaporation Contours (Isopleths) - WRC 29/09/98
  - Hydrogeology, statewide - DOW 13/07/06
  - Hydrographic catchments, catchments - DoW 01/06/07
  - Hydrography, linear - DOW 13/7/06
  - Soils, Statewide DA 11/99
  - Topographic contours statewide - DOLA and ARMY 12/09/02
  - Hydrogeology, Statewide 05 Feb 2002

**(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**

The application area is within close proximity to a number of conservation areas. The South Coast National Park (Register of National Estate) lies adjacent to the south of the property, Boorara Gardner National Park is located adjacent to the north and east of the applied area and the D'Entrecasteaux National Park is situated adjacent to the property's south and east boundaries. The local area (10km radius) is well vegetated, with approximately 70% of native vegetation remaining. A large proportion of this is protected in the form of DEC managed lands. Clearing and clearing related activities may increase the risk of weeds and dieback being introduced into the nearby conservation areas. The applicant advised that the property of which the application is apart is not within a dieback disease risk area (DEC TRIM Ref: DOC94222). However, dieback can be spread through the movement of vehicles from dieback areas to areas free from dieback and precautions should be taken to ensure the spread does not occur.

The proposed clearing may be at variance to this principle.

- Methodology** GIS DataSets:
- CALM Managed Lands and Waters - CALM 01/06/05
  - Northcliffe 1.4m Orthomosaic - 9/10/07

**(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 may be at variance to this Principle**

The Gardiner River is within the north eastern boundary of the application area. The applicant advised DEC staff that riparian vegetation along the Gardiner River (a third order watercourse) will not be cleared. There are also four first order watercourses that dissect the application area. The Warren Catchment Council has identified all areas of riparian need protection from further clearing (Warren Catchments Council 2007 - 2011) and protection for riparian zones would need to be considered (DEC, 2009).

Riparian vegetation plays a vital role in ensuring the integrity of water quality by acting as a filter, helping protect waters from pathogens, turbidity, nutrient runoff and waterborne spread of weeds (DEC, 2005).

Groundwater salinity is between 500-1000mg/L. Although the local area (10km radius) is well vegetated, with approximately 70% of native vegetation remaining, the continued clearing of native vegetation will lead to an incremental increase in groundwater salinity levels.

The proposed clearing may be at variance to this principle

- Methodology** DEC (2009)  
DEC (2005)  
GIS DataSets:
- Groundwater Salinity Statewide DoW 13/07/06
  - Hydrographic catchments, catchments - DoW 01/06/07
  - Hydrography, linear - DOW 13/7/06
  - Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
  - Salinity Risk LM 25m - DOLA 00
  - Topographic Contours, Statewide - DOLA 12/09/02

**(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**

Due to the sloping topography of the application area and given that the local area is well vegetated (approximately 70% remaining), flooding is unlikely to result due to the proposed clearing.

**Methodology GIS DataSets:**

- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DoW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments**

The Shire submitted a response to a direct interest letter and is not opposed to the proposed clearing (Trim Ref: DOC88917).

The LCDC commented on the application and requested a change in the size of the application area along with including a large buffer along the riparian zone (Trim Ref: DOC11533). The Warren Catchment Council has identified all areas of riparian need protection from further clearing within the Warren subregion (Warren Catchments Council 2007 - 2011).

The Department sent a letter to the applicant on the 23 July 2009. A response letter was received dated 11 August 2009 outlining the following:

- No evidence of nesting by cockatoos seen over the past 20 years
- A large buffer of riparian vegetation would be left along the Gardiner River. This area is unsuitable for farming given the steep terrain
- The applicant is unaware of the property being within a dieback disease risk area.

The applicant's comments have been addressed in the principles where appropriate.

**Methodology**

**4. Assessor's comments**

**Comment**

The application has been assessed against the clearing principles, planning instruments and other matter in accordance with s510 of the Environmental Protection Act 1986 has found:

- Principles (a), (c), (h) & (i) may be at variance
- Principles (b) & (f) is at variance
- Principles (d), (g) & (j) are not likely to be at variance
- Principle (e) is not at variance

**5. References**

- DEC (2005) Water Quality Protection Note: Vegetation buffers to sensitive water resources, WQ6, Department of Environment and Conservation, June 2005.
- DEC (2009a) Site Inspection Report for Clearing Permit Application CPS 3158/1, Lots 9951, 9952, 9953, 9954, 9955 and 11140 on Plan 203883, Boorara Brook. Site inspection undertaken 22/10/2008. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC90281).
- DEC (2009b) Advice, Nature Protection Branch. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC90476).
- DEC (2009c) florabase accessed via <http://florabase.calm.wa.gov.au/browse/profile/1237> on 6/07/09
- DEC (2009d) Flora Advice. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC91029).
- DEC (2009e) Advice, Species and Communities Branch. Department of Environment and Conservation, Western Australia (DEC TRIM Ref: DOC94811).
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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.
- 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.  
Warren Catchments Council (Southern Forest Landcare) Strategy for Natural Resource Management in the Warren Subregion 2007 - 2011

## 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)