



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5041/1
File Number: 2012/003150-1
Duration of Permit: From 24 August 2012 to 24 August 2014

PERMIT HOLDER

The Roman Catholic Archbishop of Perth

LAND ON WHICH CLEARING IS TO BE DONE

Lot 46 on Diagram 45174, Hammond Park

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 1.3 hectares of native vegetation within the area hatched yellow on attached Plan 5041/1.

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 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*.

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

2 August 2012

Plan 5041/1



LEGEND

- Cadastral
- Freshhold
- Crown Reserve
- State Forest / Timber Res
- Marine Park
- Crown Lease
- Lease / Reserve
- Lease on State Forest / Tr
- Public Roads
- Unallocated Crown Land
- Water
- Road Centrelines
- Clearing Instrument
- Areas Approved to Clear

* Project Data. This data has not been quality assured. Please contact map author for details.



Scale 1:1728
Approximate when reproduced at A4

Geocentric Datum Australia 1994

Aggravation in this map have not been projected. This may result in geometric distortions of measurement inaccuracies.

[Signature]
Date 2/3/12
Kerly Fabianer

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





1. Application details

1.1. Permit application details

Permit application No.: 5041/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: The Roman Catholic Archbishop of Perth

1.3. Property details

Property: LOT 46 ON DIAGRAM 45174 (Lot No. 46 FRANKLAND HAMMOND PARK 6164)
Local Government Area: City of Cockburn
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.3		Mechanical Removal	Hazard reduction or fire control

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 2 August 2012

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
<p>The vegetation under application is mapped as Heddlu Vegetation Bassendean Complex-Central and South consisting of woodland of <i>Eucalyptus marginata</i> (Jarrah), <i>Allocasuarina fraseriana</i> (Sheoak) and <i>Banksia</i> species to low woodland of <i>Melaleuca</i> species, and sedgelands on the moister sites. This area includes the transition of <i>Eucalyptus marginata</i> (Jarrah) to <i>Eucalyptus tottiana</i> (Pricklybark) in the vicinity of Perth. (Heddlu et al, 1980)</p> <p>Mapped Beard vegetation association 1001 is described as medium to very sparse woodland consisting of jarrah, and low woodland consisting of banksia & casuarina (Shepherd et al, 2001).</p>	<p>This application proposes to clear 1.3 hectares of native vegetation, for the purpose constructing a bushfire protection zone for a school.</p> <p>The vegetation under application consists of <i>Banksia attenuata</i>, <i>Allocasuarina fraseriana</i> woodland over <i>Xanthorrhoea preissii</i> and <i>Kunzea glabrescens</i>. The ground cover consists of a species diverse low herbland (DEC, 2012). Several <i>Eucalyptus marginata</i> were observed within the application area (DEC, 2012).</p> <p>The condition of the vegetation under application ranges from degraded (on the outskirts of the application area) to excellent (Keighery, 1994), with majority of the vegetation under application in an excellent (Keighery, 1994) condition (DEC, 2012).</p>	<p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)</p> <p>To</p> <p>Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)</p>	<p>The condition of the vegetation under application was obtained from a site inspection undertaken by the Department of Environment and Conservation (DEC) on the 20 June 2012.</p>

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 application proposes to clear up to 1.3 hectares of native vegetation, for the purpose of constructing a bushfire protection zone for a school. The bushfire protection zone consists of a building protection zone (0.816ha), hazard separation zone (0.442ha) and mulch path network (0.041ha). The proponent has advised that large trees will be retained wherever possible. The area under application is approximately 7.6 km south of the Kwinana townsite.

The vegetation under application consists of *Banksia attenuata*, *Allocasuarina fraseriana* woodland over *Xanthorrhoea preissii* and *Kunzea glabrescens*. The ground cover consists of species diverse low herbland. The vegetation under application is in a degraded to excellent (Keighery, 1994) condition.

Several priority flora have been mapped within 10 km of the area under application. Of these, three species -

Dodonaea hackettiana (P4), *Cyathochaeta teretifolia* (P3) and *Eremaea asterocarpa* subsp *brachyclada* (P1) have been recorded within similar vegetation types, soil types and/or topography. *Dodonaea hackettiana* is an erect shrub or tree with a preferred soil type of sand or outcropping limestone, and flowers between July and October (Western Australian Herbarium, 1998), *Cyathochaeta teretifolia* occurs on grey sand or sandy clays often around swamps and creek edges (Western Australian Herbarium, 1998) and *Eremaea asterocarpa* subsp *brachyclada* is primarily found on deep grey sands of the Swan Coastal Plain (Western Australian Herbarium, 1998).

Given that the application area consists of grey leached sands (Coffey Environments, 2008), the three abovementioned species may occur within this proposed clearing area. However, a flora survey of the proposed clearing area undertaken by Coffey Environments (2008) identified 84 flora species of which 8 were non-native. Of these flora species none were identified as rare or priority flora. The survey was conducted in October 2007. DEC considers that this survey was conducted at an appropriate time of year.

The Northern Spearwood shrublands and woodlands, a Priority 3 Ecological Community (PEC) occurs 3km north of the area under application and has the potential to occur within the application area as it is found on the same soil and vegetation type.

Several *Eucalyptus marginata* were observed within the application area, some containing medium to large sized hollows (DEC, 2012). The larger hollows have the potential to provide habitat for the Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*), classified as 'rare or likely to become extinct' under the Wildlife Conservation Act 1950. The understorey vegetation is very dense (DEC, 2012) and likely to provide suitable habitat for ground-dwelling indigenous fauna.

The proponent has advised that the majority of large trees will be retained to reduce the impact on habitat for black cockatoo species. Understorey vegetation will be reduced to a fuel load of 2 tonnes per hectare in the building protection zone and 5 to 8 tonnes per hectare in the hazard separation zone. This will be done through mechanical clearing.

Lomandra hermaphrodita was identified within the application area (Terrestrial Ecosystems, 2011). This species is the preferred habitat for the Graceful Sun-moth. A targeted survey was undertaken for the Graceful Sun Moth by Terrestrial Ecosystems (2012). No Graceful Sun Moths were recorded within the application area during this survey conducted in March 2012. DEC considers that this survey was conducted at an appropriate time of year.

The local area (10km) surrounding the application has approximately 35 percent of its pre-European vegetation remaining.

Much of the vegetation within the application area is in an excellent (Keighery, 1994) condition with the potential to provide feeding habitat for black cockatoo species and habitat for ground dwelling indigenous fauna.

Therefore the proposed clearing may be at variance to this Principle.

Methodology

References:

- DEC (2012)
- Coffey Environments (2008)
- Terrestrial Ecosystems (2011)
- Terrestrial Ecosystems (2012)
- Keighery (1994)

GIS Databases:

- NLWRA, Current Extent of Native Vegetation
- SAC Biodatasets (Accessed July 2012)
- NatureMap
- Pre European Vegetation
- Soils, statewide
- Hedde 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 at variance to this Principle

Several fauna species of conservation significance have been recorded within the local area (10km), including *Synemon gratiosa* (Graceful Sunmoth), *Neelaps calonotos* (Black-striped Snake), *Macropus irma* (Western Brush Wallaby), *Setonix brachyurus* (Quokka), *Myrmecobius fasciatus* (Numbat), *Isodon obesulus* subsp. *fusciventer* (Quenda), *Perameles bougainville* (Western Barred Bandicoot), *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black-Cockatoo), and *Calyptorhynchus latirostris* (Carnaby's Cockatoo).

Carnaby's Black Cockatoo confirmed roost areas have been recorded approximately 3km from the proposed

clearing area. This species has a significant portion of its diet made up of "seeds of hakeas, banksias, grevilleas and eucalypts" (Burbidge, 2004). The vegetation under application consists of Banksia low woodland which is highly likely to be a feeding ground for both the Carnaby's Black Cockatoo and the Forest Red-tailed Black-Cockatoo. Forest Red-tailed black Cockatoos were observed flying overhead during the site inspection (DEC, 2012). The Harry Waring Marsupial conservation Reserve, also listed as Bush Forever site 392, located approximately 550 meters west of the area under application, contains suitable foraging habitat for these species, as does the remaining remnant vegetation within Lot 46. The applicant has considered the principles of avoid, minimise by reducing the proposed clearing footprint.

Several *Eucalyptus marginata* were observed within the application area containing small to medium sized hollows. One large *Eucalyptus marginata* located in the south west corner of the application area contained several large hollows. The larger hollows have the potential to provide suitable habitat for the Carnaby's Black Cockatoo, Baudin's Cockatoo and Forest Red-tailed Black-Cockatoo. It has been advised by the proponent that the majority of large trees occurring within the application area will be retained, including the abovementioned large *Eucalyptus marginata*, as requested by the City of Cockburn.

The understorey vegetation is very dense (DEC, 2012) and likely to provide suitable habitat for ground-dwelling indigenous fauna, including but not limited to, the Black striped snake (*Neelaps calanotos*, Priority 3), Quenda (*Isodon obesulus fusciventer*, Priority 5) and Western Brush Wallaby (*Macropus irma*, Priority 4).

A fauna report by Terrestrial Ecosystems (2011) recorded Quenda diggings within the project area. The proponent has advised that Quenda relocation will occur prior to the commencement of any clearing. A DEC fauna licence pursuant to Regulation 15 of the Wildlife Conservation Regulations 1970 has been obtained by the proponent in relation to Quenda relocation.

Given the above the proposed clearing is at variance to this Principle.

Methodology

References:

- DEC (2012)
- Keighery (1994)
- Terrestrial Ecosystems (2011)
- Burbidge (2004)

GIS Databases:

- SAC Biodatasets - Accessed 13/07/2012
- NatureMap

(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

Two known records of rare flora species have been mapped within 10km of the application area. *Caladenia huegelii* and *Drakaea elastica* have been mapped approximately 3.1km and 3.3km south of the application area respectively.

Drakaea elastica occurs on white or grey sand with a preference for low-lying situations adjoining winter-wet swamps (Western Australian Herbarium, 1998). Numerous species occurring within the application area are known to be associated with low-lying or winter-wet areas such as *Kunzea glabrescens*, *Melaleuca thymoides*, *Schoenus curvifolius*, *Lepidosperma squamatum*, and *Dampiera linearis*. Therefore it is possible that *Drakaea elastica* occurs in the area under application.

Caladenia huegelii is found on grey or brown sand and clay loam and flower September to October (Western Australian Herbarium, 1998). Given the leached grey sandy soils within the area under application, this species may occur within the proposed clearing area.

A flora survey of the proposed clearing area undertaken in October 2007 by Coffey Environments identified no rare flora species, however the best time to survey for *Drakaea elastica* is July and August, when the glossy, light green leaves are conspicuous. A licence to take rare flora would be required if present within the proposed clearing area.

Given the above the proposed clearing may be at variance to this Principle.

Methodology

References:

- Coffey Environments (2008)

GIS Databases:

- SAC Biodatasets (Accessed July 2012)
- Soils, statewide
- Pre European Vegetation

(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

One threatened ecological community (TEC) has been mapped within 10km of the area under application.

The TEC is mapped approximately 5.5km southwest of the applied area and is known as SCP 26a Limestone Ridges, consisting of *Melaleuca huegelii* and *Melaleuca acerosa* shrublands on limestone ridges.

The vegetation under application consists primarily of a *Banksia attenuata*, *Allocasuarina fraseriana* woodland over *Xanthorrhoea preissii* and *Kunzea glabrescens* (DEC, 2012).

The vegetation under application is not representative of that mapped within the TEC and therefore the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
-DEC (2012)

GIS Databases:
-SAC Biodatasets (Accessed July 2012)
-Pre European Vegetation
-Hedde Vegetation

(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 local area (10km) surrounding the application has approximately 35 percent of its pre-European vegetation remaining.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Swan Coastal Plain	1,501,209	587,832	39	34
Shire*				
City of Cockburn	17,087	5,338	31	17
Beard Vegetation Association in Bioregion*				
1001	57,410	14,151	24	6
Hedde Vegetation Complex				
Bassendean Complex Central and South	87,318	24,610	28	3

* Government of Western Australia (2011)

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). However the area under application is located within the 'constrained area' of the Perth Metropolitan Region (EPA 2006). Within this area the EPA (2006) provides for the reduction of vegetation complexes to a minimum of 10 per cent pre-European extent.

Given the application area contains vegetation in excellent (Keighery, 1994) condition and habitat for conservation significant fauna, the proposed clearing area is considered a significant remnant, however as the area under application falls within a constrained area it is not likely to be a significant remnant in an extensively cleared area.

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

Methodology References:
-Government of Western Australia (2011)
-EPA (2006)

(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

The local area (10km radius) has a number of wetlands, the closest of these is an unnamed Conservation Category semeniuk dampland located approximately 400m north west of the area under application. The RAMSAR listed Forestdale and Thompson Lakes occurs 1.5km north west of the application area.

The vegetation under application is an upland vegetation community with no visible watercourses or wetlands on site (DEC, 2012).

Given the distance of the applied clearing area to the watercourses and wetlands in the local area, the clearing is not likely to be at variance to this principle.

Methodology References:
-DEC (2012)
GIS Databases:
-RAMSAR, Wetlands
-Geomorphic wetlands (Management Categories)
-Hydrography, linear
-Hydrography, Linear (Hierarchy)

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

Comments Proposal may be at variance to this Principle

The soils at this site have been mapped by Northcote et al (1960-68) as subdued dune-swale terrain with chief soils being leached sands.

Soils within the applied area are consistent with the Bassendean Dune System, with the higher areas of this system described as well drained bleached grey sands. These soils have a high risk of wind erosion, phosphorus export and acid sulphate soils (Department of Agriculture, 2005).

Given the occurrence of loose, sandy soils there is a risk of wind erosion. The applicants planning approval requires construction and dust management plans to be approved and implemented (City of Cockburn, 2012).

Therefore the proposed clearing may be at variance to this principle.

Methodology References:
- DEC (20012)
- Department of Agriculture (2005)
- Northcote et al (1960-68)
- City of Cockburn (2012)

GIS Databases:
- SAC Biodatasets - Accessed 13/07/2012
- 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 is not likely to be at variance to this Principle

The closest mapped conservation reserve to the application area is the Harry Waring Marsupial Reserve, also listed as Bush Forever site 392. This reserve is located approximately 550 meters west of the area under application and is separated from this area by a housing estate. The housing estate minimises the effectiveness of the proposed area as a linkage corridor.

Given the above the application is not likely to be at variance to this principle.

Methodology GIS Databases
-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 closest Wetland or Watercourse is an unnamed Conservation Category semeniuk dampland located approximately 400m north west of the area under application.

Soils at this site are derived from the Bassendean Dune System with chief soils being well drained bleached grey sands.

The groundwater salinity for the site is considered marginal and ranges from 500 to 1000mg/L.

Given the size of the area under application and the distance to the closest wetland, it is unlikely the proposed clearing will be at variance to this Principle.

Methodology

References:
Department of Agriculture (2005)

Gis Databases:
-Hydrography linear,
-Groundwater Salinity

(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

Flooding is unlikely to be an issue given the size of the applied area, topography on site and distance from the closest watercourse or wetland.

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

Methodology

GIS Databases:
-Soils, statewide
-Rainfall, annual
-Hydrography linear
-Hydrography linear (hierarchy)

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

Comments

No submissions from the public have been received.

The area under application has been zoned as urban under the town planning scheme.

The City of Cockburn (2012a) has advised that a flora and fauna survey should be conducted prior to clearing to identify any significant flora or habitat trees on site, and any fauna found be relocated by a fauna specialist. The City requested that should approval be granted seed collection is to be conducted prior to clearing by either the City or an experienced seed collector for revegetation projects. It has also been requested that any large trees on site be retained and incorporated within the building design to provide shade and amenity.

The applicant provided surveys with their application to clear. A flora survey was conducted in October of 2007 by Coffey Environments and a fauna survey was conducted in July of 2011 by Terrestrial Ecosystems. A targeted survey for the Graceful Sunmoth was also undertaken in March 2012 by Terrestrial Ecosystems.

Planning approval has been granted with conditions subject to approval (City of Cockburn, 2012b). Conditions of the planning approval include:

- The requirement to undertake a Native Fauna Management Plan with the provisions of the City of Cockburn Town Planning Scheme No.3 to the satisfaction of the local government.
- It is advised that the approved development is designed in accordance with FESA's bushfire management requirements.

The proponent contacted a Bush Fire Control Officer at the City of Cockburn in regards to a Fire Management Plan undertaken by Bushfire Safety Consulting Pty Ltd. It was advised that large trees can be retained if the understorey is significantly reduced, a 20m Building Protection Zone and a 20m Hazard Protection Zone from all buildings is sufficient and necessary, an one metre wide free form mulched path be constructed, existing undergrowth be slashed with resulting mulch left on the ground, and the existing boundary fire break be

extended along the northern boundary (City of Cockburn, 2012c).

The applicant has received a fauna licence from Department of Environment and Conservation to relocate quenda from the application area.

A licence to take rare flora from Department of Environment and Conservation is required if *Drakaea elastica* is located on site.

Methodology

References:

- City of Cockburn (2012a)
- City of Cockburn (2012b)
- City of Cockburn (2012c)

GIS Databases:

- Town planning scheme zone

4. References

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

City of Cockburn (2012a) Direct Interest Submission for Clearing Application CPS5041/1, Lot 46 on Diagram 45174, Hammond Park. DEC Ref: A515409

City of Cockburn (2012b) Planning Approval subject to conditions. Additional Information for CPS 5041/1, Lot 46 on Diagram 45174, Hammond Park. DEC Ref: A522582

City of Cockburn (2012c) Direct Interest Submission from Bush Fire Control Officer for Clearing Application CPS5041/1, Lot 46 on Diagram 45174, Hammond Park.

Coffey Environments (2008) Flora and Fauna Survey. Additional Information for CPS 5041/1, Lot 46 on Diagram 45174, Hammond Park. DEC Ref: A522580

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

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

EPA (2006) Guidance for the Assessment of Environmental Factors - Level of Assessment for Proposals Affecting Natural Areas Within the System 6 Region and Swan Coastal Plain Portion of the System 1 Region. Guidance Statement No 10. Environmental Protection Authority, Western Australia.

Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report), WA Department of Environment and Conservation, Perth.

Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, 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.

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., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

Terrestrial Ecosystems (2011) Flora and Fauna Survey. Additional Information for CPS 5041/1, Lot 46 on Diagram 45174, Hammond Park. DEC Ref: A522575

Western Australian Planning Commission (2012). Approval Subject to Conditions. Additional Information for CPS 5041/1, Lot 46 on Diagram 45174, Hammond Park. DEC Ref: A522582

5. 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
WRC

Threatened Ecological Community
Water and Rivers Commission (now DEC)