



## CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

<b>Purpose Permit number:</b>	CPS 5507/1
<b>Permit Holder:</b>	Shire of Trayning
<b>Duration of Permit:</b>	28 September 2013 – 28 September 2023

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 maintenance.

**2. Land on which clearing is to be done**

Kununoppin-Mukinbudin Road reserve (PIN 11661446), North Kununoppin.

**3. Area of Clearing**

The Permit Holder must not clear more than 2 hectares of native vegetation within the area shaded yellow on attached Plan 5507/1.

**4. Application**

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

**5. Type of clearing authorised**

The Permit Holder shall not clear any native vegetation after 28 September 2018.

**6. Type of clearing authorised**

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

### PART II – MANAGEMENT CONDITIONS

**7. Weed control**

(a) 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*:

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

(b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any *weeds* growing within the area shaded red on attached Plan 5507/1.

## 8. Management Plan (Offset)

The Permit Holder must implement and adhere to the "Shire of Trayning Offset Proposal, Clearing Permit Applications CPS 5523/1, CPS 5629/1 and CPS 5507/1", submitted to the Department of Environment Regulation on the 20 August 2013.

### PART III - RECORD KEEPING AND REPORTING

## 9. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:  
In relation to the offset of areas pursuant to condition 8:

- (a) the location of any area of *offsets* 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) a description of the *offset* activities undertaken; and
- (c) the size of the *offset* area (in hectares).

## 10. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
  - (i) of records required under condition 9 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 28 June 2018, the Permit Holder must provide to the CEO a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 10(a) of this Permit.

## DEFINITIONS

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

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

*mulch* means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

*offset/s* means an offset required to be implemented under condition 9 of this Permit;

*weed/s* means any plant -

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

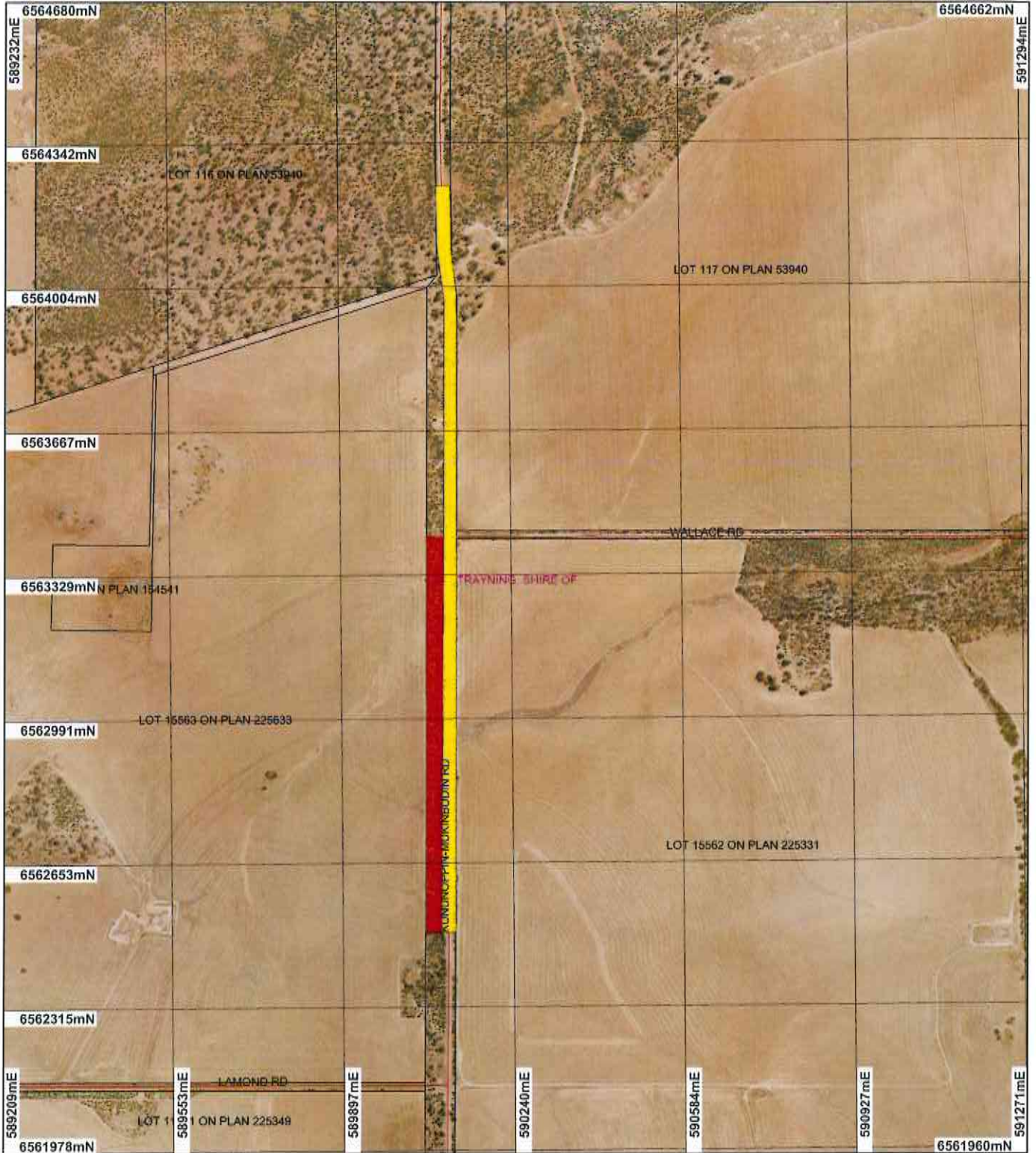


M Warnock  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

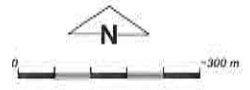
29 August 2013

# Plan 5507/1



## LEGEND

- Cadastral
- Local Government Authorities
- Road Centrelines
- Clearing Instruments (cont)
- Areas Subject to Conditions
- Areas Approved to Clear
- Trayning 50cm Orthomosaic - Landgate 2004\_1**



Scale 1:12000  
(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 inaccuracies.

*M Warnock* Date 29/8/13  
M Warnock

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

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



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Department of Environment Regulation  
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## 1. Application details

### 1.1. Permit application details

Permit application No.: 5507/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Shire of Trayning

### 1.3. Property details

Property: ROAD RESERVE (NORTH KUNUNOPPIN 6489)  
Local Government Area: Shire of Trayning  
Colloquial name: Kununoppin-Mukinbudin Road, North Kununoppin

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 29 August 2013

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard Vegetation Association: 1413 - Shrublands; acacia, casuarina and melaleuca thicket (Shepherd et al. 2001).	The proposal is for clearing of 2 hectares for the purpose of roadside maintenance within the Kununoppin-Mukinbudin Road reserve, North Kununoppin, in the Shire of Trayning.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994).  To	Vegetation description and condition were determined through aerial imagery (Trayning 50cm Orthomosaic - Landgate 2004).
Beard Vegetation Association: 8 - Medium Woodland; salmon gum and gimlet (Shepherd et al. 2001).		Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994).	

## 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 at variance to this Principle

The application is to clear up to 2 hectares of native vegetation within the Kununoppin-Mukinbudin Road reserve, North Kununoppin for the purpose of roadside maintenance.

The majority of the vegetation under application is mapped as Shrublands; acacia, casuarina and melaleuca thicket (Shepherd et al. 2001). A small area of vegetation under application is mapped as medium Woodland; salmon gum and gimlet (Shepherd et al. 2001). The vegetation under application ranges from good (Keighery 1994) to completely degraded (Keighery 1994) condition.

The vegetation under application has high conservation value (RCC 2006). This is a result of the intact structure of the vegetation within the road reserve and the high value as a biological corridor. The vegetation is mapped as having a medium level of intactness, number of native species and weed occurrence (RCC 2006).

There are numerous priority flora recorded within the local area (10 kilometre radius). A priority one flora species is mapped within the application area. This species is known from 12 populations restricted to within the Wheatbelt region; eight of these populations occur on road verges (DEC 2013b). The population within the application area contains 72 mature plants and 11 dead plants (DEC 2010). The proposed clearing will remove 57 individual plants (Shire of Trayning 2013a). The proposed clearing of 79 percent of the roadside population is significant to the conservation of the population (DPaW 2013).

Given that avoidance is not possible, conservation of the population through management of its habitat will assist in mitigating the impact of the proposed clearing on this species.

A priority four flora species is located approximately 500 metres from the application area on the same mapped soil and vegetation type. This species occurs in association with rock outcrops therefore it is unlikely to occur within the road reserve (DEC 2002).

The local area (10 kilometre radius), Avon Wheatbelt IBRA Bioregion, Shire of Trayning and the mapped vegetation types over the application area retain less than the recommended threshold level (30 per cent), below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

Within a highly cleared landscape, vegetation along road reserves is likely to act as a biological corridor for fauna movement. Although the proposed clearing will not remove all the vegetation along the road reserve, given the local area has been extensively cleared, all remaining vegetation is likely to be necessary for the maintenance of significant habitat for indigenous fauna.

The application area contains priority flora and fauna habitat and is located in an area that has been extensively cleared. Therefore, the proposed clearing is at variance to this principle.

To offset the possible impacts of the proposed clearing and clearing associated with CPS 5523/1 and CPS 5629/1, the applicant will revegetate 8 hectares of vegetation within Lot 28965 on Deposited Plan 217452, North Trayning (Shire of Trayning 2013b).

#### Methodology

##### References:

Commonwealth of Australia 2001

DEC 2002

DEC 2010

DEC 2013a

DEC 2013b

DPaW 2013

Keighery 1994

RCC 2006

Shepherd et al. 2001

Shire of Trayning 2013a

##### GIS Databases:

- Pre-European Vegetation

- SAC Biodatasets

- Soils, Statewide

- Trayning 50cm Orthomosaic - Landgate 2004

#### **(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**

There are eight conservation significant fauna mapped within the local area (10 kilometre radius). The Western Spiny-tailed Skink (*Egernia stokesii* subsp. *badia*; rare or likely to become extinct, Wildlife Conservation Act 1950 (WC Act); endangered, Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), Shield-backed Trapdoor Spider (*Idiosoma nigrum*; rare or likely to become extinct, WC Act) and Malleefowl (*Leipoa ocellata*; rare or likely to become extinct, WC Act; vulnerable, EPBC Act) (DEC, 2007-).

The closest record of a Shield-backed Trapdoor Spider is approximately three kilometres from the application area (DEC 2007-). This record occurred on mapped Beard Vegetation Association 8, this species is generally found in Eucalypt woodlands (Avon Catchment Council 2007).

The Western Spiny-tailed Skink occurs in woodlands of York Gum, Gimlet and Salmon Gum, with the majority of the recorded locations occurring on private land (DEC 2012).

The majority of vegetation under application is mapped as Shrublands; acacia, casuarina and melaleuca thicket. Therefore, these species are unlikely to occur within the application area.

Malleefowl occur within shrublands dominated by acacia, and occasionally in woodlands dominated by eucalypts such as Wandoo, Marri and Mallet (Benshemesh 2007). Malleefowl are unlikely to construct mounds and breed within the application area given the proximity of the road and an incompatible soil type.

The application area is surrounded by bare paddocks within an extensively cleared landscape, with approximately 15 percent of the pre-European vegetation remaining within the local area (10 kilometre radius).

The vegetation under application provides a linkage for fauna movement across an extensively cleared landscape. The linkage on the east side of the road reserve will be fragmented by the proposed clearing and a

corridor approximately 35 metres wide will be retained on the west side. The reduction in the width of the fauna corridor will further degrade this linkage through edge effects, thereby reducing the integrity of this link.

Given that the application occurs within an extensively cleared landscape, all remaining vegetation is likely to be significant habitat for indigenous fauna. The proposed clearing will impact on fauna movement through fragmentation and edge effects.

Therefore, the application is at variance to this principle

To offset the possible impacts of the proposed clearing and clearing associated with CPS 5523/1 and CPS 5629/1, the applicant will revegetate 8 hectares of vegetation within Lot 28965 on Deposited Plan 217452, North Trayning (Shire of Trayning 2013b).

**Methodology**    References:  
Avon Catchment Council 2007  
Commonwealth of Australia 2001  
DEC 2007-  
DEC 2012  
Shire of Trayning 2013b  
GIS Databases:  
- Pre-European Vegetation  
- Soils, Statewide

**(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**

There is one rare flora species mapped within the local area (10 kilometre radius). This species is located approximately 5.5 kilometres from the application area on different soil and vegetation types.

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

**Methodology**    GIS Databases:  
- Pre-European Vegetation  
- 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**

There are no records of threatened ecological communities within the local area (10 kilometre radius).

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

**Methodology**    GIS Databases:  
- SAC Biodatasets

**(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 at variance to this Principle**

Aerial photography indicates the local area (10 kilometre radius) is approximately 15 percent vegetated.

The IBRA Bioregion (Avon Wheatbelt) and the local government agency (Shire of Trayning) retain approximately 18 percent and 12 percent of their respective pre-European extents (Government of Western Australia 2013).

The majority of the application area is mapped as Beard Vegetation Association 1413, which retains approximately 140 766 hectares (26 percent) of its pre-European extent within the Avon Wheatbelt IBRA Bioregion. A small section of the application area is mapped as Beard Vegetation Association 8, which retains approximately 36 916 hectares (10 percent) of its pre-European extent within the Avon Wheatbelt IBRA Bioregion.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 percent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

The vegetation associations mapped over the application area both have less than 30 percent of their pre-European extents remaining. A small percentage of the vegetation remaining in these vegetation associations is held in secure Department of Environment and Conservation (DEC) tenure.

The application area is a significant remnant of native vegetation, as it contains habitat for fauna, priority flora and occurs within vegetation associations that have been extensively cleared.

Given the above, the proposed clearing is at variance to this principle.

To offset the possible impacts of the proposed clearing and clearing associated with CPS 5523/1 and CPS 5629/1, the applicant will revegetate 8 hectares of vegetation within Lot 28965 on Deposited Plan 217452, North Trayning (Shire of Trayning 2013b).

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Avon Wheatbelt	9 517 110	1 732 027	18	10
Shire*				
Shire of Trayning	165 120	20 279	12	14
Beard Vegetation Association in Bioregion*				
1413	546 641	140 766	26	8
8	356 572	36 916	10	10

\* Government of Western Australia 2013

**Methodology** References:  
Commonwealth of Australia 2001  
Government of Western Australia 2013  
Shire of Trayning 2013b  
GIS Databases:  
- NLWRA, Current extent of Native Vegetation  
- Pre-European Vegetation  
- Trayning 50cm Orthomosaic - Landgate 2004

**(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 may be at variance to this Principle**  
There are numerous watercourses located within the local area (10 kilometre radius).

A minor, non-perennial watercourse is located adjacent to the application area. Therefore the proposed clearing may be at variance to this principle.

The purpose of the proposed clearing is for road maintenance and therefore there is likely to be roadside infrastructure, such as drains and culverts, already in place to minimise impacts to these watercourses.

**Methodology** GIS Databases:  
- Hydrography, Linear  
- Trayning 50cm Orthomosaic - Landgate 2004

**(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 within the application area is mapped as Va66, which Northcote et al. (1960-1968) describes as gently undulating to rolling terrain with some ridges and uneven slopes; and with the variable presence of lateritic mesas and buttes and granitic tors and bosses; chief soils are hard alkaline yellow mottled soils and hard alkaline red soils.

The mean annual rainfall mapped over the application area is 400mm.

Given the linear area under application and the existing road infrastructure it is unlikely that appreciable land degradation will occur. Therefore, the proposed clearing is unlikely to be at variance to this principle.

**Methodology** References:  
Northcote et al. 1960 - 1968  
GIS Databases:  
- Mean annual rainfall  
- 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**

There is one parcel of DEC managed land within the local area (10 kilometre radius) being Billyacatting Hill Nature Reserve, which is located approximately four kilometres to the east of the application area. Given the distance to this nature reserve the proposed clearing is not likely to impact up the environmental values of this conservation area.

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

**Methodology** GIS Databases:  
- DEC managed lands

**(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 is one minor, non-perennial watercourse adjacent to the application area. During the works, the proposed clearing may cause short term water quality issues, such as localised surface water sedimentation. However, these issues are likely to be minimal as existing road infrastructure will prevent any significant water quality issues.

The groundwater salinity within the application area is mapped as 14000 - 35000 mg/L of Total Dissolved Solids. This level of groundwater salinity is considered highly saline. The removal of deep rooted vegetation within the application area may result in an increase in salinity.

Given the linear area under application and that remnant vegetation occurs adjacent to the entire application area, deterioration in underground water is likely to be minimised.

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

**Methodology** GIS Databases:  
- Groundwater Salinity  
- Hydrography, Linear  
- Trayning 50cm Orthomosaic - Landgate 2004

**(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**

Given the linear area under application and the existing road infrastructure to manage drainage the proposed clearing is unlikely to cause or exacerbate flooding. Therefore, the proposed clearing is not likely to be at variance to this principle.

**Methodology** GIS Databases:  
- Hydrography, Linear  
- Trayning 50cm Orthomosaic - Landgate 2004

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

**Comments**

The Department of Environment and Conservation sent a letter to the applicant regarding the environmental impacts of the proposed clearing and requested that the applicant provide further information and advise on how these impacts would be offset. To offset the possible impacts of the proposed clearing and clearing associated with CPS 5523/1 and CPS 5629/1, the applicant will revegetate 8 hectares of vegetation within Lot 28965 on Deposited Plan 217452, North Trayning (Shire of Trayning 2013b).

The application area is located within the Avon River System Surface Water Area covered by the Rights in Water and Irrigation Act 1914.

No public submissions have been received in response to this application.

**Methodology** References:  
Shire of Trayning 2013b  
GIS Databases:  
- RIWI Act areas



#### 4. References

- Avon Catchment Council (2007) Shield - backed Trapdoor Spider (*Idiosoma nigrum*) Conservation Plan No. Avon Catchment Council, Western Australia.
- Benshemesh, J. (2007) National Recovery Plan for Malleefowl. Department for Environment and Heritage, South Australia.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2002) FloraBase profile - *Darwinia* sp. Chiddarcooping. Department of Environment and Conservation, Western Australia.
- DEC (2007 - ) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed 07/03/2013.
- DEC (2010) Threatened and Priority Flora Report Form. Flora survey conducted 3/8/2010. Department of Environment and Conservation, Western Australia. DEC REF: A618571.
- DEC (2012) Western Spiny-tailed Skink (*Egernia stokesii*) Recovery Plan. Department of Environment and Conservation, Western Australia.
- DEC (2013a) Regional Advice for Clearing Permit Application CPS 5507/1. Received 26/03/2013. Department of Environment and Conservation, Western Australia. DEC REF: A613337.
- DEC (2013b) Advice regarding priority one flora species. Received 18/03/2013. Department of Environment and Conservation, Western Australia. DEC REF: A611777.
- DPaW (2013) Advice regarding priority one flora species. Received 16/08/2013. Department of Parks and Wildlife, Western Australia. DER REF: A663211.
- Government of Western Australia. (2013). 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, 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.
- RCC (2006) Roadside Vegetation and Conservation Values in the Shire of Trayning. Roadside Conservation Committee, Western Australia.
- Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Shire of Trayning (2013a) Information regarding clearing of *Grevillea minutiflora*. Shire of Trayning, Western Australia. DEC REF: A640462.
- Shire of Trayning (2013b) Offset Proposal for Clearing Permit Applications CPS 5523/1, CPS 5629/1 and CPS 5507/1. Shire of Trayning, Western Australia. DER REF: A664327.

#### 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	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)