

NATURAL RESOURCE MANAGEMENT IN TRANSPORT CORRIDORS

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# SHIRES OF YORK, GOOMALLING AND QUAIRADING



Roadside Conservation Committee (RCC) – November 2011



# Roadside Conservation Committee

## SHIRES OF YORK, GOOMALLING AND QUAIRADING

### NATURAL RESOURCE MANAGEMENT IN TRANSPORT CORRIDORS: WORKSHOP FOR SHIRE WORKS CREW

Date: 28<sup>th</sup> November 2011

Start	Duration	Presenter	Subject
8.30	10 min	Jana Sturis, RCC	Welcome & introduction to the day
8.40	25 min	Jana Sturis, RCC	The value of roadside vegetation
9.05	25 min	Jana Sturis, RCC	Fact sheet and guidelines on clearing native vegetation
9.30	30 min	Kylie Payne, RCC	Managing Special Environmental Areas in road reserves
10.00	20 min		<b>SMOKO</b>
10.20	35 min	Jana Sturis, RCC	Best practice methods for clearing native vegetation
10.55	30 min	Dr Harmohinder Dhammu, DAFWA	Identification and management of weeds
11.25	35 min	Justin Corrigan, FESA	Fire management and vegetation assessment
12.00	45 min		<b>LUNCH</b>
12.45	~1 hr 30 min	All	Site visit
2.15	15 min	All	Questions, review of afternoon, feedback forms
2.30			<b>CLOSE</b>

# Session 1

## Values of Roadside Vegetation



## Preservation of Wildflowers in WA

- Two major points:
  - More wildflower reserves
  - Wider local and main roads
- Recommendations to Cabinet included:
  - New roads in alienated land, min. road width 5 chains (100m)
  - New roads in Crown land, min. road width 10 chains (200m)
  - Investigation into existing road reserves to see what can be widened
- Cabinet agreed to recommendations
- Signed by Premier in 1962




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## Roadside Conservation Committee history

- Formed due to community concern
- Coordinate and promote the conservation and effective management of roadside vegetation
- 1969 - 1971 Road Verge Conservation Committee (RVCC)
- 1973 - 1983 RVCC reformed
- 1985 - present Roadside Conservation Committee




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## Roadside Conservation Committee

- Member representatives of the RCC:
  - DEC
  - FESA
  - Main Roads WA
  - Western Power
  - DAFWA
  - Brookfield Rail
  - ATCO Gas Australia
  - WALGA
  - Shire of Toodyay
  - City of Joondalup
  - Conservation Council of WA
  - Wildflower Society of WA




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## Services of the RCC

- Works with managers and uses of road and rail reserves to maintain and enhance reserve values
- Advice on management issues
- Training
- Vegetation management plans
- Roadside conservation value mapping
- Recognition of high conservation value roads through the Flora Roads program



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## Roadside Vegetation



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## The roads of Australia



40 laps!



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## Two distinct types of roadside

- Contrasting adjoining land use
  - Crops, grazing or urban
- Continuous vegetation
  - What's on the roadside is "the same" as outside the road reserve



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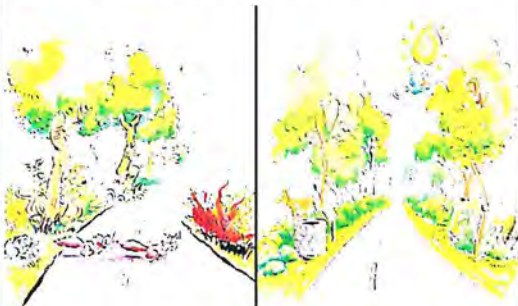
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## What are roadside values?



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## Biodiversity values

- Flora and Fauna
  - Wildlife habitat
- Corridors
  - Black Cockatoos
  - Red-tail Phascogale
  - Black Flanked Rock Wallaby
- Threatened Flora



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## Biodiversity values

- Remnant Vegetation
- Biodiversity
- Revegetation
- Scientific/Education



Vegetation types represented by less than 30% = ecologically endangered  
 Vegetation types represented by less than 10% = critically endangered  
*National Objectives and Targets for Biodiversity Conservation 2001-2005 (Environment Australia)*




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## Landcare values

- Stock shelter
- Crop shelter
- Erosion
- Salinity




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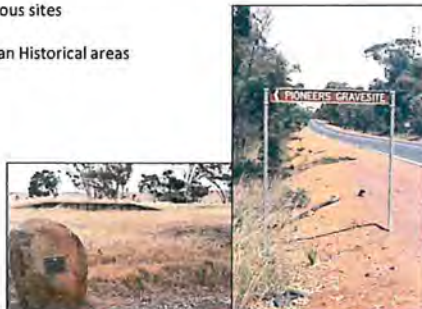
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## Cultural values

- Indigenous sites
- European Historical areas




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# Aesthetic values

- Community perceptions and expectations
- Tourism



Country	\$ in Millions Spent
UK	264
Singapore	228
Malaysia	220
USA	110
New Zealand	108
Indonesia	93
China	77
Germany	70

Tourism WA, March 2011

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Tourism WA, March 2011

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## Aesthetic values

The collage consists of six photographs arranged in a grid-like fashion. The top-left photo shows a dirt path leading through a wooded area with green foliage. The top-middle photo is a close-up of a branch with several bright red berries. The top-right photo shows a large, textured tree trunk. The bottom-left photo shows a dirt road with trees and a large tree trunk in the foreground. The bottom-middle photo is a close-up of a red flower. The bottom-right photo shows a dirt path with trees and a large tree trunk in the foreground.

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## Session 2

# Legislation in Road Reserves





# Native vegetation clearing legislation in Western Australia

*Environmental Protection Act 1986*

**Some facts from the State of the Environment report Western Australia draft 2006** (adapted from pp151-156, Environmental Protection Authority, Government of Western Australia):

- \* *Broadscale clearing of native vegetation, both historic and current is a major threatening process affecting biodiversity in Western Australia.*

- \* *The Wheatbelt region as a whole retains only 7% of its native vegetated area on average (in some areas remaining native vegetation was estimated to be as low as 1.8% in 2004).*

- \* *The urban area of Perth has doubled since the 1970s and this has resulted in the clearing of large areas of native vegetation and fragmentation of that remaining.*

- \* *Presently the main drivers of native vegetation clearing in WA are population and urban expansion in the South West, and expansion of the mining sector in the rest of the State.*

## Summary of current responses

*As well as regulating the clearing of native vegetation, other responses are also recommended including; an action plan (with the Commonwealth government), revegetation groups, regional natural resource management strategies, off-reserve conservation*

*(e.g. Bush Forever, the Roadside Conservation Committee, Land for Wildlife and Conservation Covenant programs), land use planning policy and local government (partnership projects and strategies).*

## Implications

*Native vegetation has already been cleared below safe ecological limits on some areas, especially the Wheatbelt and parts of the Swan Coastal Plain and South Coast; the salinity problem in the Wheatbelt and South West is one direct result. Further fragmentation, decline of condition and extinction is likely if clearing continues. Expansion of Perth suburbs and other towns all over the State will continue to drive clearing of native ecosystems. Clearing also negatively impacts on remnant vegetation by increasing edge effects, reducing the ability of animals to move between patches of suitable habitat, reducing colonisation ability of remaining plants, and increasing susceptibility to weed and Phytophthora dieback infestations. All community members benefit when native ecosystems are retained, as these ecosystems underpin the economy and society. Consequently all people have a role in preventing further clearing and protecting existing areas of native vegetation, not just landholders.*

## Native vegetation legislation

Regulation 4 of the *Soil and Land Conservation Regulations 1992* was repealed and replaced by amendments to the *Environmental Protection Act 1986* (EP Act) in 2004. Under this legislation, clearing is not generally permitted where the biodiversity values, land conservation and water protection roles of native vegetation would be significantly affected.

## 'Native vegetation' as defined in the EP Act and Regulations

'Native vegetation' means indigenous aquatic or terrestrial vegetation, and includes dead vegetation unless that dead vegetation is of a class declared by regulation to be excluded from this definition but does not include vegetation in a plantation (Environmental Protection (Clearing of Native Vegetation) Regulations 2004, section 3(1));





'Native vegetation' has the meaning given by section 3(1) but does not include vegetation that was intentionally sown, planted or propagated unless:

- (a) that vegetation was sown, planted or propagated as required under this Act or another written law; or
- (b) that vegetation is of a class declared by regulation to be included in this definition (EP Act Section 51A)

#### **'Clearing' as defined in the EP Act**

Clearing means;

- (a) the killing or destruction of;
- (b) the removal of;
- (c) the severing or ringbarking of trunks or stems of; or
- (d) the doing of any other substantial damage to, some or all of the native vegetation in an area, and includes the draining or flooding of land, the burning of vegetation, the grazing of stock, or any other act or activity, that causes:
- (e) the killing or destruction of;
- (f) the severing of trunks or stems of; or
- (g) any other substantial damage to, some or all of the native vegetation in an area;

#### **What are Environmentally Sensitive Areas?**

There are a number of Environmentally Sensitive Areas (ESAs) within Western Australia where exemptions in regulations do not apply. Section 51B of the EP Act allows the Minister to declare ESAs. To view ESAs visit the 'Native Vegetation Map Viewer' accessible at: [www.dec.wa.gov.au/nvc](http://www.dec.wa.gov.au/nvc) within the 'data' tab. If you want to clear native vegetation in an ESA, you should contact your local Native Vegetation Officer who will help you determine if you are exempt.

#### **What is riparian vegetation?**

'Riparian vegetation' means the distinctive vegetation associated with a wetland or watercourse.

#### **When do I require a permit?**

All clearing of native vegetation requires a permit unless it is exempt. There are exemptions for day-to-day activities that have a low environmental impact (refer to Fact Sheets 5, 6, 7 and 9). Exemptions do not apply in ESAs (refer above).

#### **What are the 10 clearing principles?**

Under section 51O of the EP Act, the CEO must have regard to 10 clearing principles when deciding to grant, or refuse, a permit. The CEO must also have regard to planning instruments (such as town planning schemes) and other relevant matters. The 10 Principles, as specified in Schedule 5 of the EP Act, are listed below:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (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.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (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.
- (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.
- (j) Native vegetation should not be cleared the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

#### **What if I clear without a permit?**

Refer to Fact Sheet 2 'Clearing Offences and Penalties' and Fact Sheet 3 'Compliance Inspections and Clearing Laws' for information about penalties and inspections.

## More information

**Fact Sheet 2: Clearing Offences and Penalties**

**Fact Sheet 3: Compliance Inspections and Clearing Laws**

**Fact Sheet 4: Complying with your Clearing Permit**

**Fact Sheet 5: Mining and petroleum activities**

**Fact Sheet 6: Fire prevention and control, collection of firewood and harvesting of wildflowers, seeds, sandalwood and timber**

**Fact Sheet 7: Clearing previously cleared land, grazing on and management of pastoral leases and Pastoral Lands Board requirements**

**Fact Sheet 8: Clearing in specific existing or potential Water Supply Catchments**

**Fact Sheet 9: When do I require a permit?**

**Fact Sheet 10: How do I apply for a clearing permit?**

## Legislation

This document is provided for guidance only. It should not be relied upon to address every aspect of the relevant legislation. Please refer to the *Environmental Protection Act 1986* and *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*, available from the State Law Publisher. Free electronic copies are available from [www.slp.wa.gov.au](http://www.slp.wa.gov.au)

## Compliance assistance documents

Additional publications relating to clearing laws, clearing permits and application forms are available online from [www.dec.wa.gov.au/nvc](http://www.dec.wa.gov.au/nvc) or can be requested by phoning 9219 8744.

## Compliance advice

For advice on complying with your permit, or any other related matter, please contact DEC's Native Vegetation Conservation Branch on 9219 8744.

For permits related to mineral and petroleum activities contact Department of Mines and petroleum on 9222 3570.





## When do I require a permit?

### *Environmental Protection Act 1986*

#### When do I require a permit?

All clearing of native vegetation requires a permit unless it is exempt.

#### How can I check if my activity is exempt?

This fact sheet only discusses a portion of the most common exemptions set out in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 for day-to-day activities that have a low environmental impact. These exemptions do not apply in identified Environmentally Sensitive Areas (refer Fact Sheet 1).

Fact Sheets 5, 6, and 7 discuss a portion of other exemptions for specific activities.

The *Environmental Protection Act 1986*, Schedule 6 details in what circumstances no permit is required to clear native vegetation (usually due to the jurisdiction of other legislation etc).

For full details on all the exemptions a publication 'A guideline to the exemptions and Regulations for Clearing of Native Vegetation' is available at: [www.dec.wa.gov.au/nvc](http://www.dec.wa.gov.au/nvc) or contact the Department of Environment and Conservation (see over for contact details).

#### Some exemptions are limited to a total of one hectare per year

The types of clearing referred to below, together with other limited clearing allowed under regulations, may not exceed one hectare in a financial year. If more than one hectare needs to be cleared, a permit must be obtained.

- *Clearing to construct a building or structure*

Clearing of native vegetation for the establishment of a dwelling, shed or other building or structure is exempt provided that other relevant approvals have been obtained, such as local government building approval, and the clearing must only be to the extent necessary.

This provision does not apply in riparian vegetation (refer Fact Sheet 1), as this is sensitive vegetation that has important

ecological functions and should not be cleared under exemption.

- *New fence lines, vehicle and walking tracks*

The exemption for new fence lines allows the owner to clear a strip of native vegetation on private property to provide access for fence maintenance or construction. Clearing may also be carried out to construct a vehicle or walking track. To help prevent degradation, construction of vehicle tracks within sensitive riparian vegetation is generally not allowed. However, where there is no reasonable alternative route, and the access track is necessary for the commercial activities of the property, it may be sited in riparian vegetation. For this exemption to be valid the track must be at least 100 metres away from any other cleared land that could be used for the purpose intended for that track. This may include vehicle tracks, walking tracks or other cleared areas.

- *Isolated trees, domestic woodwork and firewood*

You can clear an isolated tree that is more than 50 metres from any other native vegetation. Additionally you can take trees for domestic use in woodwork or for firewood if the taking will not kill the tree.

- *Maintenance of existing cleared areas around infrastructure*

The regulations specify that you may clear to maintain existing cleared areas around infrastructure if the area was legally cleared within the previous 10 years, to the same extent of the previous clearing for the following purposes:

- around a building or structure;
- for a fire risk reduction area for a building;
- to maintain an area along a fence line; or
- to maintain a vehicle or walking track.





Where clearing for the specified purpose was done more than 10 years ago, certain defined limits apply as follows

- around a building or structure - maximum of 20 metres;
- for a fire risk reduction area for a building – maximum of 20 metres;
- to maintain an area along a fence line – maximum of 5 metres; or
- to maintain a vehicle or walking track – maximum of 5 metres.

#### **What if I clear without a permit?**

Fact Sheet 2 'Clearing Offences and Penalties' and Fact Sheet 3 'Compliance Inspections and Clearing Laws' provide information about penalties and inspections.

#### **More information**

##### **Legislation**

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##### **Compliance advice**

For advice on complying with your permit, or any other related matter, please contact your nearest DEC office:

Albany 9842 4500	Kununurra 9168 4200
Bunbury 9725 4300	Manjimup 9771 7988
Geraldton 9921 5955	Narrogin 9881 9222
Karratha 9143 1488	Perth 9219 8744

For applications related to mineral and petroleum activities contact Department of Mines and Petroleum on 9222 3570.



## How to apply for a permit to clear *Environmental Protection Act 1986*

The *Environmental Protection Act 1986* (EP Act) requires that the person undertaking any clearing of native vegetation must hold a permit, unless the clearing is for an exempt purpose (refer to Fact Sheet 9). These laws apply to all private and public land throughout Western Australia.

If you are unsure if your proposed clearing activity requires a permit contact your local Department of Environment and Conservation (DEC) Office for information. If you do require a permit, an application to clear will need to be submitted to DEC.

### **Steps involved in applying for a permit to clear native vegetation**

#### **Step 1 Initial inquiry:**

To make your initial inquiry and proposal to clear native vegetation contact your local DEC office (contact numbers are listed at the end of this Fact Sheet).

#### **What types of permits are there?**

There are two types of permits:

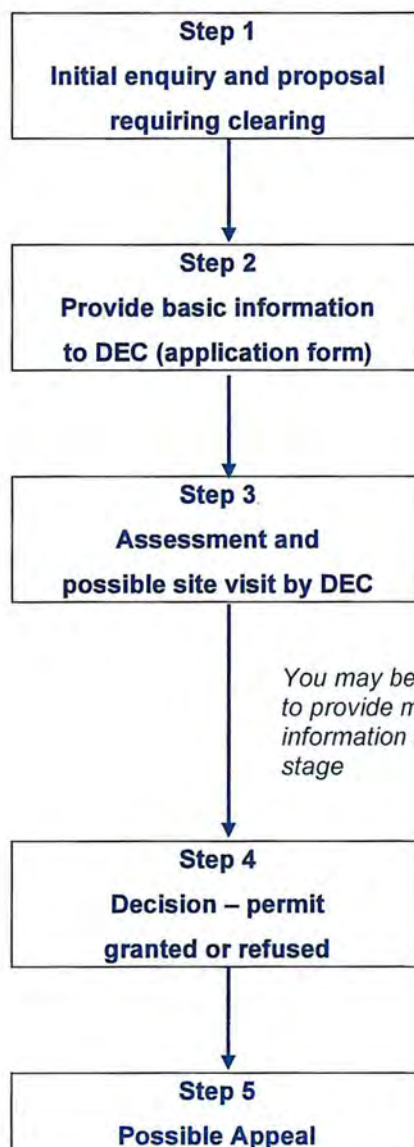
*Area Permits* – are used when the applicant is the owner of the land or when the applicant is doing the clearing on behalf of the owner of the land and has written authority to do so. Area permits are for a defined area.

*Purpose Permits* – can be used when the applicant is not the owner of the land they wish to clear but have authority under a written law or permission to access the land to undertake clearing. Purpose permits are usually for clearing of different areas from time to time for a specified purpose.

#### **Step 2 Submit application and pay application fees:**

Application forms are available at [www.dec.wa.gov.au/nvc](http://www.dec.wa.gov.au/nvc) within the 'forms' tab, or from your local DEC office.

### **The Assessment process**





To submit your application you must provide:

- A completed application form;
- Correct application fee (pay by cheque or credit card fees are detailed in the application forms); and
- Aerial photograph or map showing north and clearly indicating the area you propose to clear.

**Submit your application and payment to:**

Department of Environment and Conservation  
Native Vegetation Conservation Branch  
Locked Bag 104 Bentley Delivery Centre  
BENTLEY WA 6983

For any queries about completing your application contact DEC on 9219 8744. If you submitted your application without all of the above it will be declined and you will be advised.

Any further information that you have on the property, such as flora reports or bore readings, can also be included with your application to help DEC assess your application. This information is not compulsory with your application.

**Step 3 Assessment: What happens after I submit my application for a permit?**

At this stage a DEC officer may contact you to arrange a site visit that may include other relevant officers (e.g. from the Department of Agriculture and Food or Department of Water). You may be required to provide additional or more detailed information to help complete the assessment.

Your application will be assessed for impacts on a wide range of environmental issues including biodiversity, land degradation and water quality (refer Fact Sheet 1 for the 10 clearing principles and other definitions).

**Step 4 Decision:**

The Chief Executive Officer of DEC (or a delegate) will decide to either grant the permit or refuse the permit. The permit may be subject to conditions.

**Step 5 Possible Appeal:**

The applicant or a third party can appeal the decision or conditions of the permit. Appeals on a decision to grant or refuse a permit, or appeals on a condition of a permit are made to the Minister for the Environment through:

The Office of the Appeals Convenor  
Level 22 Forrest Centre  
221 St George's Terrace, PERTH WA 6000  
Tel: 6467 5190 Fax: 6467 5199

Email: [admin@appealsconvenor.wa.gov.au](mailto:admin@appealsconvenor.wa.gov.au)

Web: <http://www.appealsconvenor.wa.gov.au>

**What if I clear without a permit?**

Fact Sheet 2 'Clearing Offences and Penalties' and Fact Sheet 3 'Compliance Inspections and Clearing Laws' provide information about penalties and inspections.

**More information**

**Legislation**

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**Compliance assistance documents**

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**Compliance advice**

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For applications related to mineral and petroleum activities contact Department of Mines and Petroleum on 9222 3570.





## Information for purpose permit holders

*Environmental Protection Act 1986*

Purpose permit holders implement complex programs of works for specific purposes (e.g. clearing of a number of areas of native vegetation for purposes such as road widening or installing new infrastructure). The following documents have been developed to assist purpose permit holders to understand the conditions of their purpose permit in order to comply:

- **Getting to know your purpose permit**
- **Guide to developing an offset proposal**
- **Fact Sheet 11 Direct and contributing Offsets**

### **Getting to know your purpose permit**

This A3 document provides an example of a purpose permit, including examples of conditions that may be a requirement of this type of permit. It provides explanatory notes on the permit and the conditions to assist permit holders in complying with their permit.

Purpose permit holders are provided with this guide with their permit or it can be accessed at: [www.dec.wa.gov.au/nvc](http://www.dec.wa.gov.au/nvc)

### **Guide to developing an offset proposal**

Developing an offset proposal is a common condition of both purpose permits and area permits where the clearing maybe or is at variance to one of the clearing principles (this information will be outlined in the permit decision report). The offset condition often applies in areas where levels of native vegetation are very low.

Offset proposals must be approved by the CEO of DEC prior to the commencement of clearing.

The guide is an example of how to develop an offset proposal in order to comply with an offset condition and contains explanatory notes. It will assist the permit holder to exhibit exactly how they intend to offset the loss of native vegetation that they have been permitted to clear.

This guide is provided to all native vegetation clearing permit holders who are required to develop an offset proposal as a condition of their permit.

### **Fact Sheet 11 Direct and contributing offsets**

This fact sheet provides information on two types of offsets and is an extract from the Environmental Protection Authority's "Position Statement No. 9 – Environmental Offsets (January 2006) and adapted for applicants of permits to clear native vegetation.

### **Legislation**

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### **Compliance assistance documents**

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### **Compliance advice**

For advice on complying with your permit, or any other related matter, please contact DEC's Native Vegetation Conservation Branch on 9219 8744

For permits related to mineral and petroleum activities contact Department of Mines and petroleum on 9222 3570.







## Information for maintaining existing transport corridors

*Environmental Protection Act 1986*

Maintaining transport corridors is important to road safety and the longevity of infrastructure. **Roadsides and railway reserves may be important areas for nature conservation and in many areas are the only linkages or corridors between patches of remnant vegetation.** The following documents provide information about when clearing of native vegetation to maintain existing transport corridors is exempt or not, and best management practices to prevent degradation of native vegetation.

**'A Guide to Exemptions for Clearing Native Vegetation for Maintenance in Existing Transport Corridors'** Department of Environment and Conservation 2007 available at: [www.dec.wa.gov.au/nvc](http://www.dec.wa.gov.au/nvc) in the publications tab under 'guidelines'

This guide has specifically been developed to clarify the exemptions detailed in Schedule 2 of the Environmental Protection (Clearing of Native Vegetation) Regulation 2004 and contains the following:

- The first section of this guide explains how the exemptions under the Regulations operate for clearing in existing transport corridors.
- The second section of this guide contains an Index of Activities which lists items by their topic. For example, clearing for a crossover, lateral clearance area or public roadside facility.
- The third section includes a Table of Exemptions which provides summary information on the relevant exemption.

### **New works require a permit to clear native vegetation**

Any road or rail extension, widening or realignment is considered new works and requires a permit to clear native vegetation. Infrastructure upgrades such as new drains and culverts and new gravel extraction sites and extensions of existing sites also

require a permit to clear native vegetation and are not exempt.

### **Roadside Conservation Committee (RCC)**

The RCC is an advisory committee consisting of government and non-government representatives. It provides guidance and examples for the development of roadside vegetation management plans, codes of practice and by-laws incorporating best practices for conserving and managing native vegetation.

### **Best management practice documents developed by the RCC**

- Available at: [www.dec.wa.gov.au](http://www.dec.wa.gov.au)
- Handbook of Environmental Practice for Road Construction and Maintenance Works, Roadside Conservation Committee
- Guidelines for Managing Special Environmental Areas in Transport Corridors, Roadside Conservation Committee

### **Other useful RCC documents:**

- Assessing Roadsides: A guide for rating conservation value
- Verge Notes - A Roadside Note for Landholders - Mar 2005
- Verge Notes - Guidelines for the Nomination and Management of Flora Roads

### **Information relating to Dieback management developed by Department of Environment and Conservation**

- Available at: [www.dec.wa.gov.au](http://www.dec.wa.gov.au)
- Dieback Atlas, Department of Environment and Conservation 2007





### **What if I clear without a permit?**

Refer to Fact Sheet 2 'Clearing Offences and Penalties' and Fact Sheet 3 'Compliance Inspections and Clearing Laws' for information about penalties and inspections.

### **More information**

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### **Compliance advice**

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For permits related to mineral and petroleum activities contact Department of Mine and Petroleum on 9222 3570.

#### **Roadside Conservation Committee**

Committee Executive Officer 9334 0423





# A guide to the exemption for clearing **Native Vegetation** for maintenance in existing transport corridors

## *Environmental Protection Act 1986*

The clearing of native vegetation in Western Australia is regulated under the *Environmental Protection Act 1986* (EP Act) and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Regulations). Clearing of native vegetation is an offence unless a permit has been granted, or an exemption applies.

Regulation 5, item 22 (Schedule 2) of the Regulations provides an exemption for clearing for maintenance in existing transport corridors.

This guide sets out the exemptions for clearing of native vegetation to maintain existing transport corridors. It is intended to provide clarification on how the exemptions operate, who can rely on the exemptions, and where exempt clearing can

be done. It also provides broad advice on best management practice guidelines for undertaking clearing for maintenance of existing transport corridors.

An unofficial copy of the EP Act and Regulations can be downloaded from the State Law Publisher website at [www.slp.wa.gov.au](http://www.slp.wa.gov.au), or an official copy may be ordered by contacting the State Law Publisher on (08) 9321 7688.

Please note that exemptions for clearing for maintenance in existing transport corridors does not remove the need to comply with the requirements of any other legislation.



## How to use this guide

- The first section of this guide explains how the exemption under the Regulations operates for clearing in existing transport corridors.
- The second section of this guide contains an Index of Activities, which lists items by topic, for example, clearing for a crossover, lateral clearance area or public roadside facility.
- The third section includes a Table of Exemptions which provides summary information on the relevant exemption.
- The underlined terms are defined in the Glossary on page 17.

## More information

For questions relating to this guide, or to discuss whether an exemption applies to proposed clearing of native vegetation, contact the Native Vegetation Conservation Branch of the Department of Environment and Conservation (DEC) (see contact details at the end of this document).

General information regarding clearing of native vegetation and forms are available at: [www.dec.wa.gov.au/nvc](http://www.dec.wa.gov.au/nvc)

The information provided in this document provides a general guide to the exemption for clearing of native vegetation in existing transport corridors. Persons who intend to undertake road and rail maintenance activities that may involve clearing of native vegetation are advised to consult the EP Act and seek advice, including legal advice, where necessary. While the Department of Environment and Conservation has endeavoured to ensure the accuracy of the contents of this document, it accepts no responsibility for any inaccuracies or wrongful interpretation, and persons relying on this document do so at their own risk.



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## Section 1 - Clearing for maintenance in existing transport corridors

Under the provisions of the EP Act, the clearing of native vegetation is an offence unless a permit has been granted or an exemption applies.

Exemptions for clearing that is done in order to give effect to a requirement to clear under a written law or authorised under certain statutory processes are contained in Schedule 6 of the EP Act. Examples of these types of exemptions include clearing for firebreaks under the *Bush Fires Act 1954* and clearing in accordance with a subdivision approval given by a responsible authority under the *Planning and Development Act 2005*.

Exemptions for certain routine land management practices are contained in the Regulations. Examples of these types of exemptions include clearing to construct a building or other structure, new fence lines, and vehicle and walking tracks. For each exemption there are restrictions that apply.

Regulation 5, item 22 of the Regulations exempts clearing for maintenance in existing transport corridors done in accordance with item 22 and Schedule 2 of the Regulations.

DEC is aware that road and rail managers may have their own guides for undertaking maintenance activities. It is acknowledged that other guides may provide additional environmental management standards and their use is encouraged provided that managers comply with the legal obligations under the EP Act, outlined in this guideline.

### Regulation 5

Clearing is not an offence if, among other possibilities, it is of a kind prescribed for the purposes of section 51C(c), and is not done in an

environmentally sensitive area (for a discussion about environmentally sensitive areas please refer to 'Other matters- Environmentally sensitive areas', page 10). Regulation 5 of the Regulations sets out what kinds of clearing are 'of a kind prescribed for the purposes of section 51C(c)'.

One of the kinds of clearing set out in regulation 5 is clearing for maintenance in existing transport corridors.

### Clearing for maintenance in existing transport corridors

Item 22 of the table to regulation 5(1) prescribes clearing for maintenance in existing transport corridors. Clearing alongside a stretch of a road or railway must be done in an area or for a purpose specified in Schedule 2 of the Regulations. The clearing must also be to the extent specified for that area or purpose in Schedule 2 and undertaken in accordance with Schedule 2. The exemption applies to the maintenance of both public and private roads. Importantly, the exemption for clearing in existing transport corridors applies to clearing for maintenance purposes only.

Any extension, widening or realignment of an existing road or railway that requires the clearing of native vegetation would be considered new works. New works are not covered under this exemption and any clearing of native vegetation that is not exempt by virtue of Schedule 6 would require a clearing permit.

### Authority to clear

Regulation 5(1)(b) provides that the prescribed clearing must be done by, or with the prior authority of, the person listed in column 3 of the item for that exemption. Clearing for maintenance in existing transport corridors is only exempt if it is done by or with the prior authority of the Commissioner of Main Roads WA, the Public Transport Authority, the local government authority, or the person legally responsible for the stretch of road or railway (the person responsible).



The person responsible can engage an agent or contractor and authorise the agent or contractor to do the clearing on its behalf. However, the person responsible remains legally responsible for complying with the exemption and ensuring that its agent or contractor does so.

## Damage to neighbouring vegetation

Regulation 5(1)(c) provides that all prescribed clearing must be done in such a way as to limit damage to neighbouring vegetation.

## Schedule 2

Schedule 2 details the requirements that must be satisfied for the exemption for clearing for maintenance in existing transport corridors to apply. Firstly, it specifies the area in which, or purpose for which, clearing must be carried out, that is, the extent of clearing that is permissible for the specified area or purpose. Secondly, it specifies how the clearing is to be carried out.

## Previous clearing

Where the Table to clause 2(1) of Schedule 2 defines the extent of clearing allowed by reference to 'previously cleared', the previous clearing must have taken place within the 10 years immediately before the proposed clearing. In addition it either must have been lawfully cleared or the person doing the current clearing did not know and could not reasonably have been expected to know whether the previous clearing was lawful.

While in some circumstances it may be difficult to ascertain the date or extent of previous clearing, the onus of doing so is on the person responsible. That person responsible could look for, among other things, written documentation of the previous clearing, dated photography of that stretch of rail or road or a statement by the person who authorised the previous clearing.

For previous clearing to be lawful it must have been an act that was not contrary to any law. An example includes clearing that was undertaken in accordance with a statutory power including those under the:

- *Main Roads Act 1930*
- *Local Government Act 1995*
- *Public Transport Authority Act 2003.*

## Crossover area

A 'crossover area' is defined in clause 1 of Schedule 2 to the Regulations to mean the area occupied by a crossover from a road to a property adjacent to the road and any associated sight line areas, that is, it is the area of the road reserve used to access the property and any associated sight line areas.

Clearing for crossover areas is exempt under item 22, Regulation 5 only to the extent previously cleared for the area.

An exemption applies in item 21A, Regulation 5 for clearing as the result of constructing a new crossover from a road to a property adjacent to the road, and any associated sight line areas, if the construction is within the scope of an authority given by the road manager to construct the crossover. The person doing the clearing must comply with all requirements of the authority.

## Lateral clearance area

'Lateral clearance area' in relation to a stretch of road or railway, is defined in clause 1 of Schedule 2 to the Regulations to mean the area parallel and immediately adjacent to a stretch of road or railway that is ordinarily cleared'.

The lateral clearance area can be completely cleared to the width and height previously cleared for that stretch of road or railway.

Any clearing required to extend a lateral clearance area beyond that which was previously cleared would not be permitted under Schedule 2.



## Transport corridor infrastructure

'Transport corridor infrastructure', in relation to a stretch of road or railway, is defined in clause 1 of Schedule 2 to the Regulations to include 'barriers, signs, guideposts, drains, levies, embankments, gutters, bridges, overpasses and other similar structures or works'. Similar structures and works could include lighting structures, drainage sumps and culverts.

Clearing where the clearing is necessary to maintain the efficacy and safety of the infrastructure (that is to ensure that the infrastructure is safe and/or fit for its purpose); protect the infrastructure (for example, from fire); and provide access to the infrastructure to maintain it, is exempt under item 22 of the Regulations.

Note that clearing that is necessary to maintain the safety of transport corridor infrastructure does not include new clearing for safety purposes within an existing transport corridor, unless the clearing was for the purpose of preventing danger (refer definition of imminent danger below under 'Safety').

## Public roadside facility

A 'public roadside facility' is defined in clause 1 of Schedule 2 to the Regulations to include a camping area, rest area, information bay, road train assembly area, parking areas or a footpath or cycle tracks in the road reserve. Other similar facilities could include dual-use paths and roadside furniture.

Clearing in areas that are public roadside facilities is exempt under Regulation 5, item 22 to the extent that the clearing is necessary to maintain, but not extend, the intended use of the area.

## Sight line area

'Sight line area' is defined in regulation 3 to mean an area between the edge of a stretch of road or railway and a line of sight necessary for the safe use of the road or railway. The sight line area includes those areas necessary for the safe use of crossovers and public roadside facilities.

Clearing for sight line areas is exempt under Regulation 5, item 22 to the extent previously cleared for the area.

## Disposal of cleared vegetation

Clause 3 of Schedule 2 to the Regulations outlines some requirements as to how clearing for maintenance in existing transport corridors is to be carried out.

Any cleared vegetation or debris not used on site is to be removed within 90 days of the clearing. It must not be placed in a heap or windrow on uncleared vegetation and if left in a heap or windrow on cleared land it should be secured so that it will not spread. These requirements are to prevent damage to the remaining native vegetation in the area as a result of disposal of the cleared material.

It is acknowledged that some local government authorities choose to burn cleared vegetation and debris. Clause 3 does not prevent this practice, as long as such burning does not impact on the adjacent uncleared vegetation. However, in view of the risk that adjacent uncleared vegetation will be impacted upon as well as the fact that burning debris can result in pollution and reduced visibility on roads, DEC recommends alternative disposal methods.

## Other matters

### Environmentally sensitive areas

Generally, the prescribed kinds of clearing are only exempt from the operation of the section 51C offence provision if they are not done in 'environmentally sensitive areas' (ESAs). ESAs are declared by the Minister for the Environment in a notice declared pursuant to section 51B of the EP Act. The most recent notice is the Environmental Protection (Environmentally Sensitive Areas) Notice 2005 (ESA Notice) gazetted on 8 April 2005. An unofficial copy of the ESA Notice can be downloaded from the State Law Publisher website at [www.slp.wa.gov.au](http://www.slp.wa.gov.au) or an official copy may be ordered by contacting the State Law Publisher on (08) 9321 7688.



DEC has developed a 'Native Vegetation Map Viewer' available at [www.dec.wa.gov.au/nvc](http://www.dec.wa.gov.au/nvc) in the 'data' tab to assist landholders and managers in determining the location of environmentally sensitive areas. Please note that this Map Viewer is not a legal substitute for the ESA Notice.

Under the ESA Notice, an area that would otherwise be an ESA is not an ESA to the extent to which the area is within the maintenance area of a stretch of road or railway. The maintenance area of a stretch of road or railway is defined in the ESA Notice to mean 'any area in the reserve for that stretch of road or railway that is lawfully cleared'. Therefore, the exemption prescribed in Regulation 5, item 22 (of the table to Regulation 5(1) of the Regulations) is, by virtue of the blanket exclusion of all maintenance areas of stretches of road or railway from the specifications of ESAs, always applicable. For example, drains and gutters previously cleared within a road reserve that would otherwise be an ESA can be cleared under this exemption.

Other exemptions in the Regulations that are not part of Schedule 2 could not be done within an ESA.

If there are requirements under any other legislation in respect of an ESA, these will continue to apply and must be complied with. For example, it is an offence under section 23F of the *Wildlife Conservation Act 1950* to take declared rare flora without Ministerial consent, regardless of whether the area is subject to an exemption under the EP Act or the Regulations.

## Safety and accidents

Road and rail user safety is a key concern for the community. DEC recognises the importance of safety in the maintenance of existing transport corridors. Safety is recognised in the definition of 'sight line area' and in description of the extent of clearing permissible for maintenance and protection of 'transport corridor infrastructure'.

Clearing that is necessary to maintain the safety of transport corridor infrastructure does not include new clearing for safety purposes within an existing transport corridor.

Regulation 5, item 2(a) exempts clearing in non-ESAs for the purpose of preventing imminent danger to human life or health or irreversible damage to a significant portion of the environment. 'Imminent danger' refers to an immediate and present risk. For example, a tree damaged by lightning and therefore liable to fall can be cleared.

Dangers that are not present, immediate or imminent are not intended to be covered by this exemption. Potential dangers that may take years to manifest would not be considered imminent danger.

DEC can only provide broad guidance as to what in its view constitutes imminent danger because it depends on the facts of each case. The person relying on the exemption must determine whether it applies and in doing so, should have regard to the matters raised above.

Item 2(b) exempts clearing that occurs as a result of an accident where the accident was not caused by the negligence of the person clearing or the person who authorised the clearing. The term 'accident' is intended to mean an unforeseen and unexpected event and the exemption is intended to include road and rail accidents where the incident was not caused by the negligence of the person who does the clearing. An example would be where a vehicle accident resulted in clearing, and the accident was not caused by the negligence of the driver.

Cabinet of the Government of Western Australia, has approved the drafting of an amendment to the EP Act that will provide for a defence to unlawful clearing that will be in similar terms to the exemption in item 2. If the amendment is passed by both houses of Parliament, it will effectively mean that persons will be able to rely on the defence of "accident" or "prevention of danger or damage" if they face a charge of unlawful clearing, regardless of whether the clearing was in an ESA or not. It is envisaged that Regulation 5(1), item 2 would be repealed if the EP Act is amended in this way.



## Best management practice

Neither Regulation 5, item 22 of the table to Regulation 5 nor Schedule 2 of the Regulations stipulates how maintenance activities in existing transport corridors are to be undertaken. As road and railway maintenance activities will vary in each situation, methods of clearing native vegetation cannot be specified in the legislation. However, a number of recommended best management practices have been identified that should be considered when undertaking maintenance activities.

While adoption of these best management practices is voluntary, implementation of these practices should minimise the impact of maintenance activities on native vegetation.

## Planning and management

Best management practices should ideally be incorporated into the planning stages of road and rail maintenance activities. These practices could include measures to address the spread of dieback and weeds; the protection of declared rare and priority flora, specially protected fauna and threatened ecological communities; water quality, erosion and sediment control; stockpiling materials, hazardous waste and dust management.

The Roadside Conservation Committee (RCC) is an advisory committee consisting of government and non-government representatives and chaired by DEC. The RCC co-ordinates and promotes the conservation of rail and roadside vegetation and provides advice to government and the community about how to improve the planning and management of transport corridors. Guidance and examples for the development of roadside vegetation management plans, codes of practice and by-laws and how to incorporate best management practices to conserve and manage native vegetation is provided by the RCC and includes publications on effective planning and management of transport corridors.

The joint RCC, Main Roads WA and Western Australian Local Government Association's "Handbook of Environmental Practice for Road Construction and Maintenance Works" provides general guidance on vegetation control related to road maintenance. The RCC's "Guidelines for Managing Special Environmental Areas in Transport Corridors" also provides management guidelines for the protection of declared rare flora, threatened ecological communities and other special environmental areas during the maintenance of transport corridors.

These publications can be found at : [www.naturebase.net/content/view/836/974/](http://www.naturebase.net/content/view/836/974/)

- Handbook of Environmental Practice for Road Construction and Maintenance Works
- Guidelines for Managing Special Environmental Areas in Transport Corridors

Other useful documents here include:

- Assessing Roadsides: A guide for rating conservation value
- Verge Notes - A Roadside Note for Landholders - Mar 2005
- Verge Notes - Guidelines for the Nomination and Management of Flora Roads

Information relating to dieback management is available at:

[www.dec.wa.gov.au](http://www.dec.wa.gov.au)

## Training

It is recommended that the responsible person or contractors working on behalf of a responsible person ensure the people doing the work are trained to minimise the impact of maintenance activities on native vegetation.



The RCC coordinates and provides training to help people understand environmental considerations in the management of transport corridors and how they can work in an environmentally sensitive manner.

## Consultation and engagement

The responsible person is encouraged to consult stakeholders before undertaking specific maintenance works, including stakeholders with a direct interest, such as adjacent landowners or community interest groups.

Road and rail managers can also have a broader role in engaging with the community to encourage the rehabilitation of degraded rail and roadsides. This could involve working with community groups to integrate rail and roadside vegetation into regional management strategies and promoting specific research programs related to the management of rail and roadside vegetation.

## Compliance with other laws

The responsible person should ensure it is complying with all other relevant laws that may relate to the clearing. These could include:

- *Environmental Protection Act 1986*
- *Wildlife Conservation Act 1950*
- *Conservation and Land Management Act 1984*
- *Soil and Land Conservation Act 1945*
- *Environment Protection and Biodiversity Act 1999 (Cth)*
- *Aboriginal Heritage Act 1972 or*
- *Native Title Act 1993 (Cth).*

## Monitoring and compliance

DEC is currently establishing procedures to enable periodic monitoring of native vegetation. The monitoring will be undertaken using geospatial information such as aerial photography and satellite imagery to determine the extent of clearing within Western Australia. The data will be used to provide information on illegal clearing, audit of clearing permits, and the extent of general vegetation. Those areas of the State identified as having high clearing activity will be monitored more frequently.

It is the responsibility of the person responsible for road or railway maintenance to ensure its activities are exempt under the EP Act or the Regulations or, in the absence of an exemption, to obtain a clearing permit. Penalties apply for the clearing of native vegetation where a permit has not been obtained and a valid exemption does not apply.

## Section 2 – Index of activities

ACTIVITY	CLAUSE	PAGE (Regulation)
Authority to clear	Regulation 5(l)(b).	4
	Column 3 of item 22 of the table to Regulation 5(1)	14
Damage to neighbouring vegetation	Regulation 5(l)(c)	4
Crossover/crossover area	Regulation 5, item 21A of the table to Regulation 5(1)	13
	Clause 1, clause 2(1) and the table to clause 2(2) of Schedule 2	31
Lateral clearance area	Clause 1, clause 2(1) and the table to clause 2(2) of Schedule 2	31-32
Public roadside facility	Clause 1, clause 2(1) and the table to clause 2(2) of Schedule 2	31-32
Transport corridor infrastructure	Clause 1, clause 2(1) and the table to clause 2(2) of Schedule 2	31-32
Sight line area	Regulation 3 and clause 2(1) and the table to clause 2(2) of Schedule 2	32
Disposal of cleared vegetation	Clause 3 of Schedule 2	32-33
Imminent danger & accidents	Regulation 5, item 2 of the table to Regulation 5(1)	5



## Section 3 - Table of exemptions

Topic / Regulation	Wording in regulations (including 7 July 2006 amendments)	Explanation/Comments
<p>Maintenance in existing transport corridors</p> <p>Regulation 5(1)(a), item 22(a), (b) &amp; (c)</p>	<p><i>Regulation 5(a)</i></p> <p>Clearing is of a kind prescribed for the purposes of section 51C(c) if —</p> <p>(a) it is described in an item in the table to this subregulation.</p> <p><i>Item 22</i></p> <p>Clearing in relation to a stretch of road (whether public or private) or railway if the clearing is carried out —</p> <p>(a) in an area or for a purpose specified in Schedule 2; and</p> <p>(b) to the extent specified for that area or purpose in Schedule 2; and</p> <p>(c) in accordance with Schedule 2.</p>	<p>This exemption applies to clearing in existing transport corridors. In order to be exempt, the clearing must be carried out in accordance with Schedule 2.</p> <p>The exemption for clearing in existing transport corridors applies to clearing for maintenance purposes only.</p> <p>While this exemption does not apply in environmentally sensitive areas, clearing the maintenance area of a stretch of road or railway, where that area has been cleared before and is cleared in accordance with this exemption, is deemed not to be clearing within an environmentally sensitive area.</p>
<p>Authority to clear</p> <p>Regulation 5(1)(b), item 22 'person'.</p>	<p><i>Regulation 5(b)</i></p> <p>Clearing is of a kind prescribed for the purposes of section 51C(c) if —</p> <p>(b) it is by, or with the prior authority of, a person listed in the item in which the clearing is described.</p> <p><i>Item 22</i></p> <p>The Commissioner of Main Roads, the Public Transport Authority, the local government, the person or the entity responsible for the stretch of road or railway.</p>	<p>The clearing for maintenance in an existing transport corridor must be done by, or with the prior authority of, Main Roads WA, the Public Transport Authority, the local government, or any other person or entity legally responsible for the stretch of road or railway.</p>

Impact on neighbouring vegetation Regulation 5(1)(c)	Clearing is of a kind prescribed for the purposes of section 51C(c) if —  (c) it is done in such a way as to limit damage to neighbouring native vegetation.	Clearing for maintenance in an existing transport corridor must be done in a way to limit damage to neighbouring native vegetation.
New crossover Regulation 5(1)(a), item 21A	Clearing that is the result of constructing a crossover from a road to a property adjacent to the road, and any associated sight line areas, if the construction is within the scope of the authority to construct the crossover.	<p>The exemption under item 21A enables the clearing of an area for constructing a new crossover.</p> <p>The clearing for constructing a new crossover must be done by, or with the prior authority of Main Roads WA, the Public Transport Authority, the local government, or any other person or entity legally responsible for the stretch of road or railway.</p> <p>This exemption does not apply in an environmentally sensitive area.</p>
Existing crossover Schedule 2(1), 2(2) in Table	crossover area clearing to the extent previously cleared for the area.	<p>The exemption under Schedule 2 enables the maintenance of a crossover to the extent previously cleared.</p> <p>The clearing for maintenance of an existing crossover must be done by, or with the prior authority of Main Roads WA, the Public Transport Authority, the local government, or any other person or entity legally responsible for the stretch of road or railway.</p> <p>While this exemption does not apply in an environmentally sensitive area, clearing for the maintenance of a crossover, where that area has been cleared in accordance with this exemption, is deemed not to be clearing within an environmentally sensitive area.</p>



Existing lateral clearance area  Schedule 2(1), 2(2) in Table	lateral clearance area complete clearing to the width and height previously cleared for that stretch of road or railway.	<p>The exemption under Schedule 2 enables the maintenance of a lateral clearance area to the extent previously cleared.</p> <p>The clearing for maintenance of an existing lateral clearance area must be done by, or with the prior authority of Main Roads WA, the Public Transport Authority, the local government, or any other person or entity legally responsible for the stretch of road or railway.</p> <p>While this exemption does not apply in an environmentally sensitive area, clearing for the maintenance of a lateral clearance area, where that area has been cleared in accordance with this exemption, is deemed not to be clearing within an environmentally sensitive area.</p>
Existing public roadside facility  Schedule 2(1), 2(2) in Table	an area that is a public roadside facility clearing to the extent necessary to maintain (but not extend) the intended use of the area.	<p>The exemption under Schedule 2 enables the maintenance of a public roadside facility to the extent previously cleared.</p> <p>The clearing for maintenance of an existing public roadside facility must be done by, or with the prior authority of Main Roads WA, the Public Transport Authority, the local government, or any other person or entity legally responsible for the stretch of road or railway.</p> <p>While this exemption does not apply in an environmentally sensitive area, clearing for the maintenance of a public roadside facility, where that area has been cleared in accordance with this exemption, is deemed not to be clearing within an environmentally sensitive area.</p>

Existing transport corridor infrastructure Schedule 2(1), 2(2) in Table	<p>maintenance and protection of transport corridor infrastructure</p> <p>clearing to the extent necessary to —</p> <p>(a) maintain the efficacy of the infrastructure;</p> <p>(b) protect the infrastructure (for example, from fire); and</p> <p>(c) provide access to the infrastructure to maintain it.</p>	<p>The exemption under Schedule 2 enables the maintenance and protection of existing transport corridor infrastructure to the extent necessary to maintain the efficacy of the infrastructure or protect the infrastructure or to provide access to the infrastructure to maintain it.</p> <p>The clearing for maintenance of an existing transport corridor infrastructure must be done by, or with the prior authority of Main Roads WA, the Public Transport Authority, the local government, or any other person or entity legally responsible for the stretch of road or railway.</p> <p>While this exemption does not apply in an environmentally sensitive area, clearing for the maintenance of transport corridor infrastructure, where that area has been cleared in accordance with this exemption, is deemed not to be clearing within an environmentally sensitive area.</p>
Existing sight line area Schedule 2(1), 2(2) in Table	<p>sight line area</p> <p>clearing to the extent previously cleared for that area.</p>	<p>The exemption under Schedule 2 enables the maintenance of a sight line area to the extent previously cleared.</p> <p>The clearing for maintenance of an existing sight line area must be done by, or with the prior authority of Main Roads WA, the Public Transport Authority, the local government, or any other person or entity legally responsible for the stretch of road or railway.</p> <p>While this exemption does not apply in an environmentally sensitive area, clearing for the maintenance of a sight line area, where that area has been cleared in accordance with this exemption, is deemed not to be clearing within an environmentally sensitive area.</p>



Disposal of cleared vegetation  Schedule 2(3)	Clearing is to be carried out so that any cleared vegetation or debris —  [(a) deleted]  (b) to the extent to which it is not used on the site, is removed from the site within 90 days of the clearing; and  (c) if it is to be removed from the site —  (i) is not placed in a heap or windrow on uncleared vegetation; and  (ii) is left in a heap or windrow (that is secured so that it will not spread) until it is removed.	Cleared vegetation or debris in an existing transport corridor, if not used on-site, is to be removed within 90 days of clearing. If the debris is to be removed it should be stockpiled away from uncleared vegetation and secured to prevent spreading.
Imminent danger  Regulation 5(1)(a), item 2(a)	Clearing —  (a) for the purposes of preventing imminent danger to human life or health or irreversible damage to a significant portion of the environment;	The exemption under item 2 enables clearing to reduce imminent danger to human life or health or irreversible damage to a significant portion of the environment.  The clearing must be done by the owner of the land on which the clearing is to take place. The clearing must be done by a person responsible for the safety or welfare of the persons who are likely to be in danger or for the portion of the environment.  This exemption does not apply in an environmentally sensitive area
Accidents  Regulation 5(1)(a), item 2(b)	Clearing resulting from accidents or to reduce danger  Clearing —  (b) as a result of an accident caused otherwise than by the negligence of the person clearing or the person who authorised the clearing.	The exemption under item 2 provides for clearing caused as a result of an accident.  This exemption does not apply in an environmentally sensitive area.

## GLOSSARY OF TERMS

TERM	MEANING	SECTION/REGULATION
crossover area	Means the area occupied by a crossover from a road to a property adjacent to the road and any associated sight line areas.	<i>Schedule 2, Clause 1.</i>
environmentally sensitive area	Means an area declared in the <i>Environmental Protection (Environmentally Sensitive Areas) Notice 2005</i> to be an environmentally sensitive area.	<i>Environmental Protection (Environmentally Sensitive Areas) Notice 2005</i>  <i>8 April No. 55</i>
lateral clearance area	In relation to a stretch of road or railway,  means the area (if any) parallel to and immediately adjacent to the stretch of road or railway that is ordinarily cleared.	<i>Schedule 2, Clause 1.</i>
maintenance area	Of a stretch of road or railway, means any area in the reserve for that stretch of road or railway that is lawfully cleared	<i>Environmental Protection (Environmentally Sensitive Areas) Notice 2005</i>  <i>Clause 4(4).</i>
public roadside facility	Includes a camping area, rest area, information bay, road train assembly area or parking area or a footpath or cycle track in the road reserve.	<i>Schedule 2, Clause 1.</i>
previously cleared	(a) the previous clearing took place within the 10 years immediately prior to the proposed clearing; and  (b) either —  (i) the previous clearing was lawful; or  (ii) the person clearing does not know, and cannot reasonably be expected to know, whether the previous clearing was lawful.	<i>Schedule 2, Clause 1 &amp; 2(2).</i>
transport corridor infrastructure	In relation to a stretch of road or railway, includes barriers, signs, guideposts, drains, levies, embankments, gutters, bridges, overpasses and other similar structures or works.	<i>Schedule 2, Clause 1.</i>
Sight line area	Means an area between the edge of a stretch of road or railway and a line of sight necessary for the safe use of the stretch of road or railway.	<i>Regulation 3.</i>



## More information

DEC contact details

### Roadside Conservation Committee

Committee Executive Officer 9334 0423

### Advice about your application

For general queries concerning the clearing of native vegetation contact DEC's Native Vegetation Conservation Branch on 9219 8744.

### Forms and publications

Additional publications relating to clearing laws, clearing permits and application forms are available online from [www.dec.wa.gov.au/nvc](http://www.dec.wa.gov.au/nvc).

### Submitting your application form

For queries about completing or submitting your application, contact DEC on 9219 8744 and when complete post it to:

Native Vegetation Conservation Branch DEC  
Locked Bag 104 Bentley Delivery Centre  
BENTLEY WA 6983

# Session 3

## Special Environmental Areas in Road Reserves



## MANAGEMENT OF THREATENED FLORA AND SENSITIVE AREAS IN TRANSPORT CORRIDORS



Department of  
Environment and Conservation

### Legislation

- All native flora is protected under the *Wildlife Conservation (WC) Act (1950)* and the *Environmental Protection (EP) Act (1986)*.
- Flora cannot be 'taken' without proper authorisation and in accordance with prescribed licence and authority.

Department of  
Environment and Conservation

### Definition of "To Take"

- Under the WC Act, 'take' means to -
  - gather
  - pluck
  - cut
  - pull up
  - destroy
  - dig up
  - remove or
  - injure the flora
- or to cause or permit the same to be done by ANY MEANS.

Department of  
Environment and Conservation

## Policy

□ Special protection provided for Threatened flora

□ Policy Statement No. 9:

"To conserve threatened flora in the wild in Western Australia and to comply with Section 23F of the Wildlife Conservation Act."



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## Threats to Transport Corridor Values

- Disease – 'Dieback' *Phytophthora cinnamomi*
- Grazing from domestic, native or feral animals
- Inappropriate fire regimes
- Herbicide sprays
- Salinity
- Weed invasion
- Direct disturbance – firebreaks, gravel pits, roadside maintenance



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## ESA: Environmentally Sensitive Area



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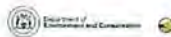
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## Environmentally Sensitive Areas

ESAs conserve the integrity of specific items:

- Biodiversity
  - Threatened
  - Significant flora and ecological communities
  - Threatened and significant fauna
- Heritage
  - Aesthetic, historic or social significance
- Archaeological
  - Indigenous sites
- Geological
  - Unusual or rare formations
- Scientific
  - Research sites




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## ESA Markers

- Accepted standard are yellow 'hockey stick' markers
  - Supplied by DEC
- Generally erected at each end of the road side population although more may be used to delineate area
- Top of marker pointing towards DRF population.




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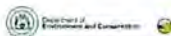
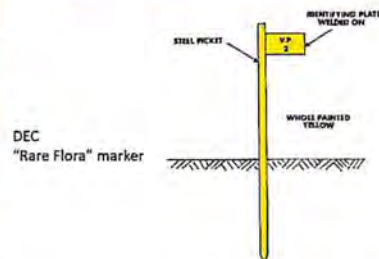
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## ESA Markers




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## South-west Flora

- ❑ Biodiversity: 8000 + species of native flora
- ❑ Internationally renowned for its diversity and uniqueness
- ❑ High diversity + fragmented landscape = rare & threatened
- ❑ Endemism: 70% are not found anywhere else in the world
- ❑ WA has over 50% of Australia's threatened flora – most in SW
- ❑ Over 800 known threatened flora populations on road or rail reserves (30% of threatened flora populations occur in transport corridors). 3 DRF are known only from roadsides




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## Rare Flora within York

<i>Acacia brachypoda</i>	<i>Hemiandra hancocksiana</i>
<i>Acacia cuneifolia</i>	<i>Lechenaultia hortii</i>
<i>Acacia drummondii</i> subsp. <i>affinis</i>	<i>Lechenaultia loricata</i>
<i>Acacia pulchella</i> var. <i>reflexa acuminata</i> bracteole variant	<i>Leucopogon</i> sp. Flynn (F. Hart, J. Hart & A. Lowrie 859)
<i>Adenanthos cygnorum</i> subsp. <i>chamaephyton</i>	<i>Rhodanthe pyrethrum</i>
<i>Asterolasia grandiflora</i>	<i>Senecio gilbertii</i>
<i>Baronia penicillata</i>	<i>Stylidium longitubum</i>
<i>Caladenia integra</i>	<i>Stylidium scabridum</i>
<i>Calothamnus rupestris</i>	<i>Stylidium striatum</i>
<i>Darwinia thymoides</i> subsp. <i>bella</i>	<i>Tetrotheca similis</i>
<i>Dryandra aurantia</i>	<i>Thomasia glabripetala</i>
<i>Eucalyptus exilis</i>	<i>Verreauxia verreauxii</i>
<i>Eucalyptus latens</i>	<i>Verticordia serrata</i> var. <i>linearis</i>
<i>Eucalyptus laxophleba</i> x <i>wandoo</i>	<i>Villarsia submersa</i>
	<i>Wurmbea drummondii</i>




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## Roadside Rare Flora - York

*Thomasia glabripetala*



Habitat



Flower



Habitat




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*Acacia ataxiphylla* subsp. *magna* *Frankenia glomerata*

*pyriformis*

*Verticordia hughanii*



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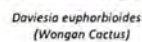
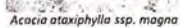
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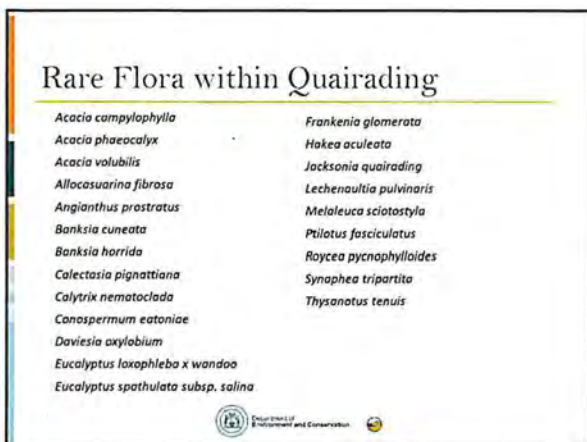
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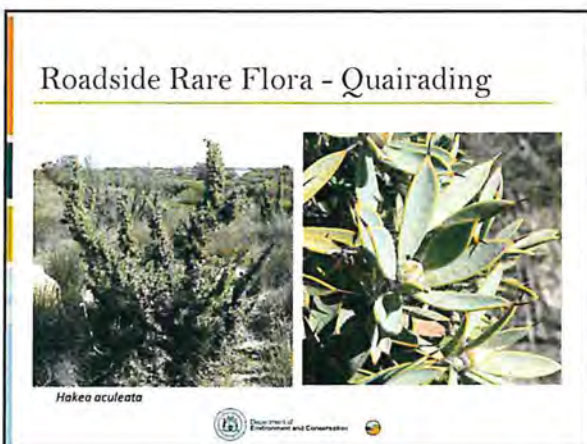
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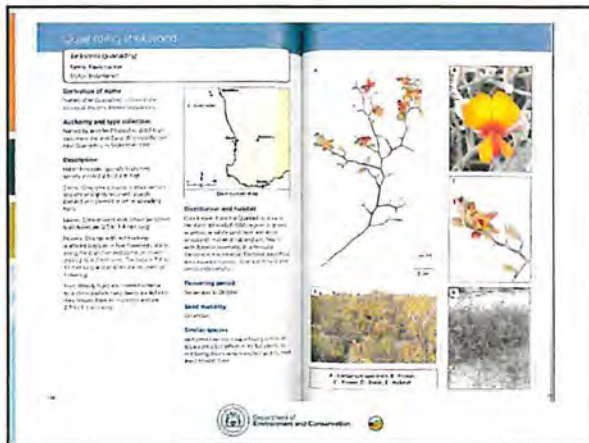
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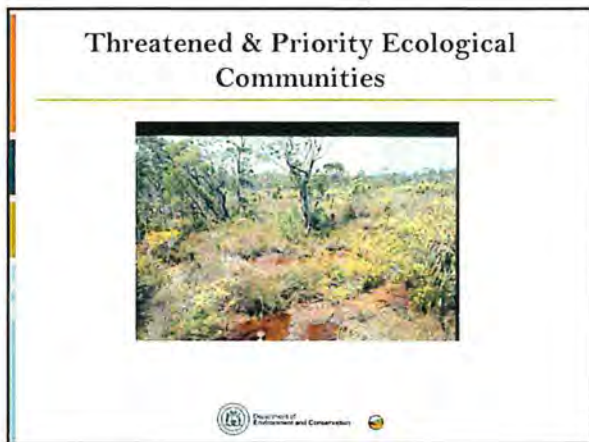
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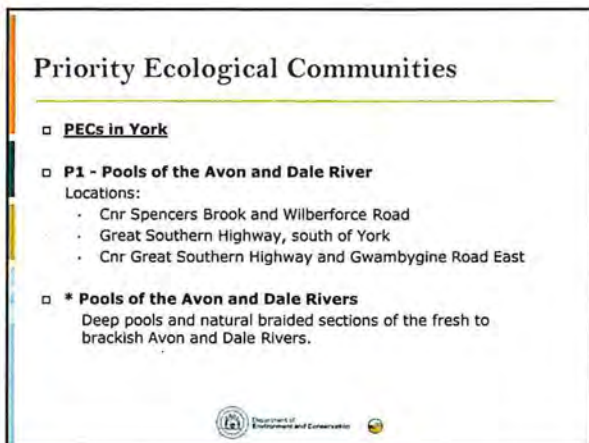
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## Priority Ecological Communities

- ❑ **PECs in Goomalling**
- ❑ **P1 - Red Morrel Woodlands of the Wheatbelt**
- ❑ Between Calingiri-Goomalling Rd and Goomalling-Wyalkatchem Rd, north of townsite



*Eucalyptus longicornis* Photo G.F. Craig




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## Priority Ecological Communities

- ❑ **PECs in Quairading**
- ❑ **P1 Banksia prionotes and Xylomelum angustifolium low woodlands on transported yellow sands**
- found in:
  - Crown Reserve along Quairading-York Road
  - McLellan St Reserve,
  - Badjaling Nature Reserve
- ❑ **P1 - Tamma-Dryandra-Eremaea shrublands on cream sands of the Ulva Landform Unit**
- ❑ Crown Reserve along Quairading-York Road




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## Flora Roads



Berry Brow Rd, Shire of York




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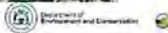
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## Disturbance Opportunists



*Daviesia euphorbioides*  
(Wongan Cactus)



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## Important Factors for Disturbance Opportunists

- ❑ Time of year – Season (the right time of year to have already produced seed after flowering)
- ❑ Time interval - Frequency (the time given between disturbances to reach reproductive maturity and produce enough viable seed)



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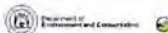
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## What DEC can do for you

- ❑ Provide location details on Threatened Flora populations
- ❑ Assist with "To Take Applications"
- ❑ Provide on-site assessment
- ❑ Collect seeds or cuttings from Threatened Flora populations that are to be taken
- ❑ Provide and erect Threatened Flora markers
- ❑ Information on various management strategies, such as Shire 'adopting' a Threatened plant, etc



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## Managing ESA's in roadsides

### REMEMBER

If clearing native vegetation is required in or near any areas associated with ESA markers (yellow hockey sticks) contact local DEC Officers for advice, prior to undertaking any works.



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## Contact details

**Department of Environment and Conservation**  
Robert Bendon (Flora Conservation Officer) Northam  
9622 8940 (mobile 0427 228 949)  
moving to DAFWA office in 2 weeks,  
75 York Rd, Northam 6401

**Roadside Conservation Committee**  
Jana Sturis (Executive Officer) Kensington  
9334 0423 or 0417 090 131



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# Roadside Conservation Committee

## Flora Road Nomination Form

For enquiries phone 9334 0423

Name of person making nomination: \_\_\_\_\_

Date: \_\_\_\_\_

### Contact details:

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Postal address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



### General Information:

Road Name: \_\_\_\_\_

Locality: \_\_\_\_\_

Shire: \_\_\_\_\_

### Road Reserve Details:

Length of road section (km): \_\_\_\_\_

Width of road reserve (m) – see diagram: \_\_\_\_\_

Width of roadside vegetation (m): \_\_\_\_\_

Condition of vegetation: \_\_\_\_\_

\_\_\_\_\_

Vegetation Type (Eg. types of trees, shrubs or annuals): (if known)

\_\_\_\_\_

\_\_\_\_\_

Is the road close to a Main road or Highway? (Please name) \_\_\_\_\_

\_\_\_\_\_

Have RCC roadside surveys been carried out previously? \_\_\_\_\_

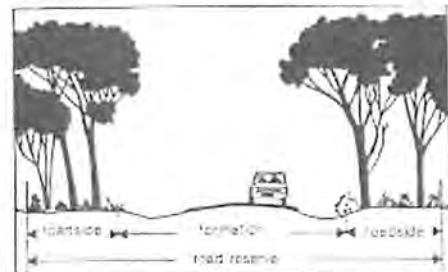
Are there other values are present? (i.e. landscape, cultural, tourism, historic, etc) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Other information/comments: \_\_\_\_\_

\_\_\_\_\_



**Please include photos if possible. Photos should show the road as part of a landscape rather than close ups of particular plant species.**

**To nominate a Flora Road, please fill in this form and send to the Roadside Conservation Committee via:**

**Post- Locked Bag 104, Bentley Delivery Centre, Bentley, WA 6983.**

**Fax- (08) 9334 0199.**

**Email- rcc@dec.wa.gov.au**

## Session 4

# Best Practice Methods for Clearing Native Vegetation



## Best Practice Management clearing methodology



Roadside Conservation Committee

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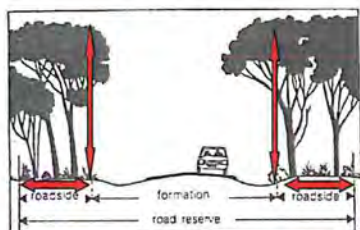
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## Terminology

- What is the road side?  
– Top of the backslope to the fence



Roadside Conservation Committee

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## Objective



Allowing for a clear zone

WHILE...

Maintaining various  
values



AND...




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## Objective

### Avoiding the ugly




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## Planning and Design

- Plan for clearing at an early stage of project
- Width of road reserve taken into account
  - drain construction can potentially damage substantial amounts of vegetation.
- Shrubs and ground cover plants should be retained on backslopes:
  - Assists in reducing drain scour
  - Reduce siltation
  - Provides a safer recovery zone.
- Vegetation to be retained should be marked out well before clearing occurs.




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## Machinery



- Machinery for clearing should be suited to the particular vegetation type.
- Rubber-tyred vehicles cause less damage to topsoil, understorey
  - used where possible.
- Smaller machinery should be used where possible
- Larger machinery requires more space to manoeuvre
  - Less selective about clearing.




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Tools of the trade



Tree Pruner

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Tools of the trade



Dozer/Grader



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Tools of the trade



Slasher

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Tools of the trade



Excavator

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Tools of the trade



Slope and ditch mower

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Tools of the trade



Hammer head mulcher

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### The Outcome to avoid

If used incorrectly  
these machines can  
have undesirable  
outcomes




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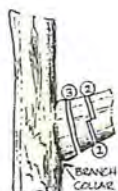
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### The Outcome to aim for



Felling trees onto roadways  
can reduce vegetation  
damaged as a result of  
clearing.




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### Vegetation Control

- Vegetation may need to be removed:
  - Affect road safety by reducing vision
  - Encroach on the road
- Need to avoid unnecessary damage
  - Work in designated areas
  - Prune enough to meet safety standards
  - Avoid SEAs
  - Prune for a natural finish (e.g. entire branch)
  - Spread mulch over bare areas – weed control
  - Dispose of waste appropriately – avoid burning
  - Don't "tidy" understorey
  - Avoid pushing graded roadside and vegetation back into the roadside vegetation




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## Weed Control

- Compete and displace native vegetation
- Increased fire hazard
- May require action to remove if identified in regulation
- Actions to take:
  - Identify weeds for specific action
  - Train staff in weed ID
  - Apply effective weed control
  - Manage topsoil movement
  - Clean equipment and vehicles
  - Minimise disturbance of vegetation
  - Dispose of weeds appropriately




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## Herbicide use

- Can be effective at controlling weeds
- Application can also effect native plants
- Minimise use and ensure appropriate techniques are used
  - Use approved products at recommended rate
  - Train herbicide operators
  - Ensure herbicide programs are effective
  - Maintain records
  - Avoid runoff
  - Liaise with neighbours
  - Consider alternatives to herbicides




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## Ongoing Management

- Managing the remaining vegetation is important to ensure longer term problems are not created.
- Vegetation should not be heaped on roadsides
  - Can increase fuel loads and
  - Impact on the health of other vegetation.
- Where possible cleared material should be used in rehabilitation/revegetation of similar condition/type sites as it provides a cheap source of local seed stock.




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### Ongoing Management

- Where larger vegetation needs to be removed (i.e. line of site clearing)
  - Pruning can minimise damage to surrounding vegetation.
- Allowing ground cover vegetation to remain undisturbed can reduce erosion and weed problems.
- Burning cleared vegetation should only be used as a last resort and further legislative requirements may apply to burning activities.




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### In Summary

Think about how you can minimize clearing:

- Does the road have to be that wide?
- Can we widen to one side which may have a lower biological value?
- Can we incorporate passing bays for low volume roads?
- Can we realign the road into an adjacent cleared paddock?
- Are there engineering options?




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### Getting Help

**Jana Sturis**  
RCC Executive Officer  
Ph: 9334 0423  
E-mail: [rcc@dec.wa.gov.au](mailto:rcc@dec.wa.gov.au)




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## Session 5

# Identification and Management of Weeds




## Session 6

# Fire Management and Vegetation Assessment

Fire Ecology; Fire Regimes; Fire Management Strategies

Blackburn Conservation, Construction, and Fire Emergency Services Authority



FESA

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Fire Ecology

FESA

- Some ecosystems have evolved to survive fire - some plants may even require fires to regenerate.
- However, fire can have both strong negative and positive impacts on natural populations of both flora and fauna, and thus careful management is required.
- Fire management in road and rail reserves therefore presents a challenge in balancing the risk from fire to adjoining life and property with the biodiversity values of the native vegetation.




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Fire Ecology

FESA

- The effect of a fire is determined by the response of plants to the fire frequency, intensity and seasonality.
- Fire regimes are characterised by:
  - Intensity
  - Frequency
  - Season
  - Spatial pattern or extent.




Figure 1: Conceptual diagram illustrating the relationship between fire regimes and various factors.

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## Fire Frequency

The time between fires:

- A fire regime too frequent may cause a change in the vegetation structure or localised species extinction.
- Long periods without fire will lead to a senescent vegetation and also add to fuel levels, which in turn increases the fire intensity and behaviour if and when it eventually is burnt.



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## Fire Frequency



Seeders



Lignotubers



Sprouters

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## Fire Intensity

Fire intensity is the heat produced by a fire and is directly affected by the fuel loads available.



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## Fire Seasonality

**FESA**  
Fire Ecology Service Australia

Seasonality of fires: the time of year in which a fire occurs influences the intensity of the fire

- temperatures
- humidity
- moisture retained in the vegetation and soil.

Seasonality also influences plant recovery post fire.




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## Burn Distribution

**FESA**  
Fire Ecology Service Australia

The distribution of fires through an area can influence the survival of some flora and fauna.

Fires that leave pockets unburnt allow vegetation sensitive to fire to recolonise burnt areas and creates a multi-aged plant community.

A patchy burn also allows fauna to take refuge from the fire and enables them to survive after the fire, as unburnt vegetation offers shelter and food otherwise unavailable in completely burnt vegetation.




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## Fuel Loads

**FESA**  
Fire Ecology Service Australia

The amount and type of fuel available to burn has a major role in defining fire behaviour, its intensity and subsequent impact on the ecosystem.

A general rule, the greater the fuel load the greater the rate of spread of the fire, and as a consequence the greater the intensity and resources needed to control it.

FESA is developing a series of Visual Fuel Load Guides for the State and these may be useful particularly for inexperienced persons in assessing fuel loadings.

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# FIRE = Weeds = FIRE

or

# FIRE = Weed Management = Native Vegetation



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## Fire Management



Linear strips vulnerable to disturbance



Roadside environment needs to be understood before making decisions

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## Fire Management

FESA strongly recommends that road and rail managers write a fire management plan.

The objectives of management actions should give consideration to:

- The prevention of fires along road reserves;
- The potential hazards/risk of fire;
- Biodiversity conservation;
- The containment of roadside fires; and
- Recovery from fire.



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## Fire Management Strategies

### 1. Protection



This management strategy is most appropriate for areas with:

- High conservation value vegetation
- Fire vulnerable vegetation
- Threatened flora, TECs or PECs, or threatened fauna
- Other environmentally sensitive areas (ESA)
- *Phytophthora* dieback risk
- Low weed density
- Lots of hollow logs and trees with hollows
- Historical or archaeological sites
- Fragile areas or vulnerable natural features
- Low fuel loads
- Low fire risk




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## Fire Management Strategies

### 2. Grade Shoulders and Drains



This management strategy is a good solution where most of the factors listed above apply but some form of fuel break is needed between the road's travelling surface and the vegetation.

This strategy may not be appropriate for areas with a *Phytophthora* dieback risk, unless appropriate hygiene is implemented, i.e. vehicles and machinery are clean on entry and exit.




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## Fire Management Strategies

### 3. Slash Shoulders and Drains



Slash vegetation growing in drains and shoulders

- Reduces fuel loads and height
- Should occur prior to seed head production.

Suitable management strategy

- Same situation described for grading
- Used where there is a risk of erosion, *Phytophthora* dieback or herbicide runoff into sensitive areas.

Vehicles and machinery should be clean on entry and exit of soil and plant material

- Consult DEC if Threatened or priority flora, threatened or priority fauna, TECs or PECs, and ESAs are involved to ensure that planned works will not impact these values.




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## Fire Management Strategies


### 4. Spray Shoulders and Drains



Herbicide spraying in drains and on shoulders can prevent vegetation, particularly annual grasses, from growing close to the road surface.

Spraying, like slashing, is suitable for erosion and *Phytophthora* dieback risk areas.

However, care must be taken with off-target damage, where the herbicide can kill native vegetation growing on the roadside, or where the herbicide can damage aquatic plant and animal life.



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## Fire Management Strategies

### 5. Selective Fuel Reduction



This management strategy is most appropriate for areas with:

- High conservation value vegetation
- Fire vulnerable vegetation
- DRF or other environmentally sensitive areas
- Low weed density
- High fuel loads
- Medium to high risk to property



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## Fire Management Strategies

### 6. Fuel Reduction Burns



With careful consideration, fuel reduction burns can be used to reduce fuel loads and promote regeneration.

This management strategy is appropriate for areas with:

- High risk to surrounding life and property
- Low conservation value vegetation
- Fire regenerative vegetation
- No DRF, TECs or threatened fauna
- No environmentally sensitive areas
- No historical sites
- High weed density
- High fuel loads

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## Fire Management Strategies

### 7. Firebreaks



Firebreaks on roadsides are most suitable when the roadside is particularly wide and where a firebreak is considered the best option to protect roadside vegetation and other values.

Firebreaks for the protection of adjacent values or assets, such as crops, should generally be constructed within the property where the value to be protected is located. However, the values at risk if a firebreak is not constructed or adequately maintained should also be taken into account.



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## Where to from here?



Once a Fire Management Plan has been developed constant review and improvement of the plan is essential.

Vegetation on roadsides is dynamic, the structure, fuel loads and ecology changes regularly – any plan must take this into account.



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
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## Take Home Messages



- Fire can have both strong negative and positive impacts on natural populations of both flora and fauna, and thus careful management is required.
- Fire regimes are characterised by:
  - ✓ Intensity
  - ✓ Frequency
  - ✓ Season
  - ✓ Spatial pattern or extent
- Select the right management strategy for the job – burning is not always the best solution.



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## Assessing Roadside Vegetation Fire Requirements

**FESA**  
Fire Ecology and Safety Australia


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## Why assess roadside vegetation?

**FESA**  
Fire Ecology and Safety Australia

An assessment of the roadside environment, surrounding values and potential fire behaviour will develop an understanding of potential impacts, hazards and risks to native vegetation and adjoining life and property of an individual roadside.


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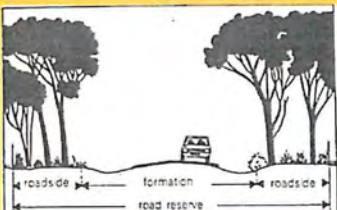

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## Description of the Area

**FESA**  
Fire Ecology and Safety Australia

- Road Information
- Left or right side of the road
- Road reserve width and roadside vegetation
- Land use and assets
- Vegetation
- Fuel Loads


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## Identify and Assess Environmental Values

**Roadside Vegetation:**

- Conservation Value
- Threatened Flora
- Environmentally Sensitive Areas (ESA's)
- Special requirements for flora habitat
- Dieback
- Weed Density



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
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## Identify and Assess Environmental Values

**Wildlife:**

- Threatened Fauna
- Hollow logs and Tree Hollows
- Connecting uncleared areas
- Wildlife considerations



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
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## Identify and Assess Other Values

**Surrounding Values:**

- Aboriginal or European Heritage
- Fragile areas and Natural features
- Water Catchments and storage
- Aesthetics
- Threat to and from adjoining property
- Utilities and Roadside furniture



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## Identify and Assess Other Values



**Current Management:**

- Roadside Vegetation Management Plan (RVMP)
- Revegetation Areas
- Weed Control programs
- Monitoring and survey
- Interest groups




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## Identify and Assess Fire Issues



- Fire History
- Fuel Load
- Fuel Type
- Likely Fire Behaviour




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## Checklist

### FIRE AND ROADSIDE ASSESSMENT



**1. Roadside Vegetation**

Item	Yes	No	Comments
Is there a roadside vegetation management plan?			
Is the roadside vegetation management plan up-to-date?			
Is the roadside vegetation management plan implemented?			
Is the roadside vegetation management plan reviewed regularly?			
Is the roadside vegetation management plan communicated to the public?			

**2. Roadside Fuel Load**

Item	Yes	No	Comments
Is the roadside fuel load assessed regularly?			
Is the roadside fuel load assessed by a qualified person?			
Is the roadside fuel load assessed using a standard method?			
Is the roadside fuel load assessed using a standard scale?			

**3. Roadside Fuel Type**

Item	Yes	No	Comments
Is the roadside fuel type assessed regularly?			
Is the roadside fuel type assessed by a qualified person?			
Is the roadside fuel type assessed using a standard method?			
Is the roadside fuel type assessed using a standard scale?			

**4. Roadside Fire Behaviour**

Item	Yes	No	Comments
Is the roadside fire behaviour assessed regularly?			
Is the roadside fire behaviour assessed by a qualified person?			
Is the roadside fire behaviour assessed using a standard method?			
Is the roadside fire behaviour assessed using a standard scale?			

### FIRE AND ROADSIDE ASSESSMENT - Side 2

**5. Roadside Fire History**

Item	Yes	No	Comments
Is the roadside fire history assessed regularly?			
Is the roadside fire history assessed by a qualified person?			
Is the roadside fire history assessed using a standard method?			
Is the roadside fire history assessed using a standard scale?			

**6. Roadside Fire Risk**

Item	Yes	No	Comments
Is the roadside fire risk assessed regularly?			
Is the roadside fire risk assessed by a qualified person?			
Is the roadside fire risk assessed using a standard method?			
Is the roadside fire risk assessed using a standard scale?			

**7. Roadside Fire Management**

Item	Yes	No	Comments
Is the roadside fire management assessed regularly?			
Is the roadside fire management assessed by a qualified person?			
Is the roadside fire management assessed using a standard method?			
Is the roadside fire management assessed using a standard scale?			

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### Roadside Fire Management Guidelines



- Roadside burning must not take place without the consent of the managing authority.
- Local Governments should adopt local policies to manage roadside fuel loads.
- Biodiversity conservation and the abatement of fire hazard should form the basis of all fire management decisions.



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### Roadside Fire Management Guidelines



- Firebreaks should be considered on roadsides where the firebreak is considered necessary to protect the vegetation or surrounding assets without lessening its conservation value.
- The road manager shall specify the maximum width to which the break may be constructed.
- In the case of any dispute concerning roadside fire management, FESA should be called in to arbitrate



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# FIRE AND ROADSIDE ASSESSMENT

This assessment should be undertaken after reading, and in conjunction with, "Management Guidelines for Fire Use and Control in Road and Rail Reserves"

Shire \_\_\_\_\_

Road name \_\_\_\_\_

Road Category \_\_\_\_\_

Length of road and reserve in this assessment (km) \_\_\_\_\_

Date \_\_\_\_\_

Assessment No \_\_\_\_\_

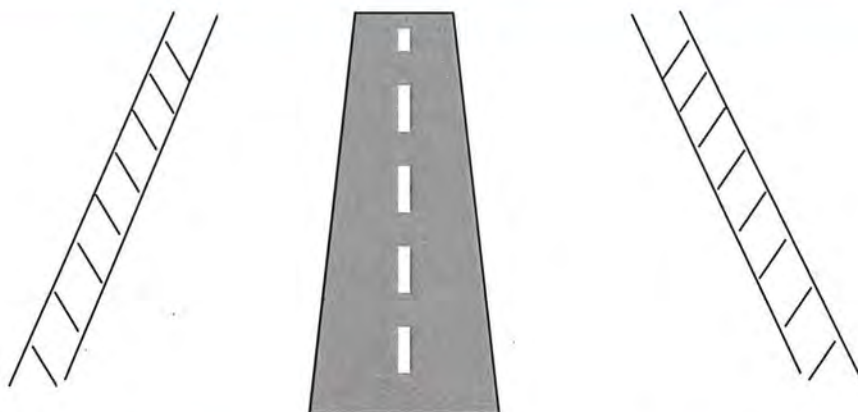
Assessment by \_\_\_\_\_

## Description

- Step 1. Indicate land use on adjacent land  
 Step 2. Indicate width of road and roadside reserves  
 Step 3. Describe vegetation in the road reserve  
 Step 4. Indicate fuel loads in the road reserve and adjacent land  
 Step 5. Indicate proximity of property

## Left Verge

## Right Verge



ADJACENT LAND

RESERVE

ROAD

RESERVE

ADJACENT LAND

## Objective(s) to be Addressed (Part 4)

## Environment

### Roadside Vegetation (Part 5, contact DEC)

(Please circle)

Is the vegetation in good condition (high conservation value)?	High	Medium high	Medium low	Low	Unknown
Is there any known Declared Rare Flora (DRF)?	Yes	No		SLK:	
Are there any other Environmentally Sensitive Areas (ESA)?	Yes	No		SLK:	
Are there any special requirements for flora habitat?	Yes	No		SLK:	
Are phytophthora dieback precautions needed?	Yes	No			
What is the weed burden?	High	Medium high	Medium low	Low	Type:

### Wildlife (Part 5, contact DEC)

(Please circle)

Are there any threatened fauna to consider?	Yes	No	Species:	
Are hollow logs present?	Yes	No	SLK:	
Are trees with hollows present?	Yes	No	SLK:	
Does the roadside vegetation connect areas of uncleared vegetation?	Yes	No		
Are there any other wildlife considerations?	Yes	No	Description:	

Please complete other side

# FIRE AND ROADSIDE ASSESSMENT – Side 2

## Surrounds

### Surrounding Values (Part 5, contact DIA, WC, FESA)

Are there historical or archaeological sites (Aboriginal or European)?

(Please circle)

Yes

No

SLK:

Are there fragile areas or natural features (eg. caves, steep slopes, granite outcrops)?

Yes

No

Is there a gazetted water catchment or water storage boundary involved?

Yes

No

Is the road a Flora Road, tourist drive or major road?

Yes

No

What is the threat to surrounding property?

High

Medium

Low

### Current Management (contact DEC, local groups, RCC)

Is this road covered by a roadside vegetation management plan?

(Please circle)

Yes

No

Are there any revegetated areas?

Yes

No

SLK:

Are there any weed control programs for this road?

Yes

No

Will any monitoring or survey sites be disturbed?

Yes

No

SLK:

Do other groups have an interest in this roadside (eg. DEC, weed action group, Lions Club)?

Yes

No

Group:

## Fire

### Risk of a Fire Starting (Part 5, FESA Visual Fuel Guide)

(Please circle)

Time since the last fire (years)?

0 – 5

5 – 10

>10

What is the estimated fuel load (t/ha)?

0 – 5

5 – 10

>10

What is the fuel type?

Grasses

Shrubland

Woodland

### Fire Risks (Part 5, contact FESA)

(Please circle)

What is the likely fire behaviour along this road?

Low

Medium

High

What will the fire behaviour be if it leaves the road reserve?

Low

Medium

High

What is the extent of fire prevention works on adjoining land?

Firebreak

No firebreak

Width:

### Advice will be sought from:

DEC

FESA

RCC

Dept Ag and Food WA

Main Roads

Shire

Local groups

Other:

### Treatment solution Left:

No action

Grade drains

Slash drains

Spray herbicide in drains  
(Contact DAF and DEC)

Selective hazard reduction

Burn  
(Contact FESA)

Firebreak

### Treatment solution Right:

No action

Grade drains

Slash drains

Spray herbicide in drains  
(Contact DAF and DEC)

Selective hazard reduction

Burn  
(Contact FESA)

Firebreak

### Rational for treatment choice:



# Session 7

## Site Visits

## Spencers Brook Road, York



NOTES:



## Ashworth Road, York



NOTES:



## Mokine Road, York



NOTES:



## Hamersley Siding Road, York



NOTES:

# Session 8

## Review and Feedback





## RCC TRAINING FEEDBACK FORM



Please mark where you think most reflects the training.

<b>Content</b>	----- -----
	Too little                      Spot on                      Too much
<b>Pace</b>	----- -----
	Too little                      Spot on                      Too much
<b>Format</b>	----- -----
	Too little                      Spot on                      Too much

**Comments:** We're interested in:

What was most valuable to you? \_\_\_\_\_

\_\_\_\_\_

What could have been improved? \_\_\_\_\_

\_\_\_\_\_

What other training might be helpful in your job? \_\_\_\_\_

\_\_\_\_\_