

ROADSIDE
MANAGEMENT MANUAL

For:
DEPARTMENT OF ENVIRONMENTAL PROTECTION

July 2000 ,
299369

ABOUT THIS MANUAL

The Roadside Management Manual provides you with information on how to recognise the importance of roadsides in Western Australia and how to maintain and manage their biodiversity and heritage. It is a guide to:

- understanding the value of roadsides in the area in which you are operating;
- recognising if your activities are likely to impact on roadsides;
- where to find information about roadside issues;
- what Government Acts or policies may affect what you want to do;
- whether you need to refer your proposal to a Government agency; and
- how to reduce the impact of your actions on roadsides.

WHY ARE ROADSIDES IMPORTANT?

Roadsides and the communities they support are important for a number of reasons.

- They often contain examples of the native vegetation of an area. In some areas, this vegetation may be the only remnant the original native flora in the area. In such cases, roadside vegetation contains examples of the local gene pool and ecosystems.
- Roadside vegetation provides nesting and habitat areas for local fauna. It also provides a local food source e.g. nectar, flowers, seeds, insects and small animals.
- Rare or endangered flora or fauna may exist within roadside vegetation. Due to large scale clearing in many areas of the State, roadside vegetation often provides they only remaining example of threatened plant and animal communities.
- In areas where the majority of native vegetation has been cleared, roadside vegetation can provide corridors for native fauna to travel between areas of remnant vegetation.
- The vegetation provides windbreaks for neighbouring farmland helping to minimise erosion.
- Roadside areas often contain significant Aboriginal and European heritage sites.
- Roadside vegetation can provide a scenic outlook for road users, particularly in developed or cleared areas.

- During wildflower season, roadside vegetation can provide a dramatic display of native wildflowers which is a valuable asset to the tourist industry.
- Remnant roadside vegetation can provide seed stock for revegetation projects in neighbouring areas.

ARE YOUR ACTIONS GOING TO HAVE AN IMPACT ON THE ROADSIDE?

If your proposal is going to have any of the following impacts on the environment within the roadside, you will need to gather information about the natural and social environment in the immediate area to determine how serious the impact will be.

- Clearing of any native vegetation (e.g. trees, shrubs, wildflowers, leaf litter, etc).
- Removal or importing of any topsoil.
- Cut and fill activities such as burying cables or pipes, roadworks, road verge grading, upgrading drainage, etc.
- Altering the drainage along the roadside, either diverting water into or away from the roadside.
- Disturbance to any old buildings, stone arrangements, signs or similar features.

WHERE DO I GET INFORMATION ABOUT THE ROADSIDE?

There are a number of sources of information about the natural and social environment of roadsides. The following table outlines issues and the likely source of information.

<input type="checkbox"/> Flora.	<ul style="list-style-type: none"> • The local CALM office, Council/Shire, Main Roads WA or Agriculture WA may be able to provide information on flora in roadside areas. If not, they may be able to recommend a consultant who can survey the area. • Vegetation maps of the area through the Department of Land Administration. • If the area you are interested in is close to Perth, contact the Ministry for Planning to see if it is within a Perth Bushplan reserve.
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<input type="checkbox"/> Fauna.	<ul style="list-style-type: none"> The local CALM office, Council/Shire or Main Roads WA may be able to provide information on fauna in roadside areas. If not, they may be able to recommend a consultant who can survey the area.
<input type="checkbox"/> Declared rare flora and fauna.	<ul style="list-style-type: none"> CALM can provide a list and description of rare and endangered flora and fauna within the area. This list may not be complete, so check with the local Council/Shire who may have additional information or may be able to recommend a consultant who can survey the area. They will also be able to give advice on what to do if you do find any rare or endangered species.
<input type="checkbox"/> Disease.	<ul style="list-style-type: none"> The local CALM office should be able to provide information on disease in roadside areas. If they don't have details, either their officers will survey the area or they will be able to provide advice on who can carry out a survey for you. The local CALM office or Council/Shire can also provide advice on what hygiene measures to use to limit the spread of disease.
<input type="checkbox"/> Pests (i.e. introduced species).	<ul style="list-style-type: none"> The local CALM or Agriculture WA office can provide information on introduced species in roadside areas.
<input type="checkbox"/> Weeds.	<ul style="list-style-type: none"> The local CALM office or Council/Shire can provide details on weeds present in the area. In agricultural areas, Agriculture WA may be able to provide information.
<input type="checkbox"/> Aboriginal Heritage.	<ul style="list-style-type: none"> The Aboriginal Affairs Department can provide a list of significant Aboriginal sites in roadside areas. If they have not record of sites, they will provide a list of consultants who can conduct a site survey and talk to the local community. The Department will also provide advice on what to do if significant sites are likely to be disturbed.
<input type="checkbox"/> European Heritage.	<ul style="list-style-type: none"> The Australian Heritage Commission can provide a list of features listed on the national heritage inventory and what you must do if they are likely to be disturbed. The local Council/Shire can provide information on any sites which may be listed on the Municipal Heritage Inventory and what you must do if they are likely to be disturbed.

<input type="checkbox"/> Fire.	<ul style="list-style-type: none"> • Check with the local CALM office or Council/Shire for the daily fire risk in the area in which you will be working. In high temperatures, there may be a ban on the use of machinery due to extreme fire risk. • These offices can also advise if you need to install or upgrade fire breaks.
<input type="checkbox"/> Waste.	<ul style="list-style-type: none"> • The local Council/Shire will provide details on where to dispose of everyday rubbish and hazardous material (e.g. oil, fuel, chemicals and empty chemical containers).
<input type="checkbox"/> Scenic Quality.	<ul style="list-style-type: none"> • The local Council/Shire will provide details on the scenic quality of roadsides within their area, particularly in relation the wildflower displays. • WA Tourist Commission can provide information on important wildflower areas.
<input type="checkbox"/> Wetlands.	<ul style="list-style-type: none"> • CALM, the DEP and/or local Council/Shire can indicate if a wetland is near your project area and any special requirements you may have to undertake to protect that lake.
<input type="checkbox"/> Water Resources.	<ul style="list-style-type: none"> • The Water Corporation or Waters and Rivers Commission can provide information on whether the roadside is within a water protection area and what requirements there may be on your proposal.
<input type="checkbox"/> Coastal Areas.	<ul style="list-style-type: none"> • CALM or the local Council/Shire can provide information on whether the area in which you are interested is located within the coastal zone.

WHAT DOES THE LAW REQUIRE ME TO DO?

Many operations carried out along the roadside are controlled by Government legislation. The following table indicates which issues will be affected by what legislation and who to contact for advice and information.

Issue	Requirement	Who to Contact
<ul style="list-style-type: none"> • Environmental protection. • Pollution prevention (e.g. dust, noise or water). 	<i>Environmental Protection Act 1986.</i>	Dept. Environmental Protection.
<ul style="list-style-type: none"> • Rare flora and fauna. 	<i>Wildlife Conservation Act 1950.</i>	Dept. Conservation and Land Management.
<ul style="list-style-type: none"> • Flora and fauna and 	<i>Conservation and Land Management Act 1984</i>	Dept. Conservation and Land Management.

reserves.		
• Seed collection.		CQM
• Clearing within a road reserve.	<i>Soil and Land Conservation Act 1945.</i>	Dept. Conservation and Land Management.??
• Fire control.	<i>Bush Fires Act 1954</i>	Bush Fires Board.
• Weeds/Pests.	<i>Agricultural and Related Resources Act 1976.</i>	Agriculture WA.
• Land development	<i>State Planning Commission Act 1985.</i>	Ministry for Planning.
• Land ownership	<i>Land Act 1966.</i>	Dept. Land Administration.
• Anything related to Aboriginal sites.	<i>Aboriginal Heritage Act 1972-1980 (in particular Section 18).</i>	Aboriginal Affairs Dept.
• Anything related to European heritage.	<i>Australian Heritage Commission Act 1975. Municipal Inventory</i>	Australian Heritage Commission. Local Council.
• Wetlands.	<i>Environmental Protection (Swan Coastal Plain Lakes) Policy, 1992. Environmental Protection Policy for Wetlands in the Southwest of the State 1993.</i>	Dept. Environmental Protection.
• Surface and groundwater.	<i>Water Authority Act 1987.</i>	Water Corporation. Water and Rivers Commission.
• Local issues.	<i>Local Government Act, 1960.</i>	Local Council/Shire. WA Municipal Association.
• Roadside management.	<i>Main Roads Act 1930.</i>	Main Roads WA.
• Removal of gravel/soil for road works.	<i>Mining Act 1978.</i>	Dept of Minerals and Energy.

WHAT DO YOU DO WITH ALL THIS BACKGROUND INFORMATION?

After obtaining information about the conservation and social value of the roadside which may be affected by your project you may have to collect some additional information by carrying out site surveys and prepare some form of environmental management plan or management guidelines.

The agencies you contacted to obtain background information will have given you some indication of the need to undertake further surveys or the form of environmental management document which may be required.

The following additional surveys may be required.

- **Rare and endangered flora and fauna.** If it is known that these are present in or near the area in which you are interested you will probably be required to have the area surveyed by a qualified consultant to try and locate populations which may need to be protected.
- **Flora and Fauna.** If not much information is available on the area in which you are interested, you may have to conduct surveys of both flora and fauna in the immediate area.
- **Disease.** If the disease status of the roadside you are interested in is not known, the area will have to be surveyed. The local CALM office or Council/Shire may carry out the survey.
- **Aboriginal Heritage.** The Aboriginal Affairs Department will indicate if any significant sites exist in your area of interest. They may also indicate if you need to undertake any further surveys or consultation.

Below are some of the documents which you may be required to prepare.

- **Notice of Intent (NOI).** This is required for any new road construction or removal of more than 1 ha of native vegetation from any roadside. It must be submitted to the Commissioner of Soil and Land Conservation.

An NOI will detail what you intend to do, what impact it will have on the environment and how you will manage those impacts. **Guidelines on what is required in the NOI are available from the Commissioner of Soil and Land Conservation.??**
- **Referral Notice.** This is a description of your proposal which will be sent to the Department of Environmental Protection. It will need to outline your proposal, the likely environmental impacts and how you will manage them. The DEP will use this information to decide whether your proposal needs to be formally assessed. If not, they will provide you with advice on how to manage the operation to limit environmental impacts.
- **Roadside Management Plan.** This management plan will show what impacts your actions will have on the environment and show the best ways to manage these impacts and maintain roadsides. **The Roadside Conservation Committee can provide assistance preparing this plan. ??**
- **Application to disturb an Aboriginal site.** This is an application which is required under Section 18 of the *Aboriginal Heritage Act 1972-1980*. The Aboriginal Affairs Department will be able to provide you with details of what is required for this application.

What to include in an environmental document.

With all of the above documents, you will need to address some or all of the following topics.

Your Project

- A description of your project.
- What equipment will you use?
- Will you be servicing your or refuelling your vehicles on the site?
- Will you have a vehicle compound or store on the site?
- Do you need a local water supply?

Flora

- Describe the existing vegetation, including the presence of wildflower areas or nature reserves.
- Outline approximately how much vegetation will be cleared or disturbed by your operation.
- Describe how you will minimise impacts on the vegetation.

Fauna

- Describe the existing fauna populations in the area.
- Describe the likely impacts of your project on the fauna.
- Describe how you will minimise impacts on the fauna.

Declared Rare or Endangered Flora and Fauna

- Describe the populations of rare or endangered flora and/or fauna in the area, if any.
- Describe the likely impacts of your project on these populations.
- Describe how you will minimise the impacts on the populations of rare or endangered species.

Disease

- Describe the extent of disease in the area.
- Describe the likely impacts of your project on the spread of disease.
- Describe how you will limit the spread of disease.

Weeds/Pests

- Describe the presence of weeds and pests in the area.
- Describe the likely impacts of your project on the spread of weeds and pests.
- Describe how you will minimise the spread of weeds and pests.

Wetlands/Rivers

- Does the roadside you will be working in lie near a wetland or river and how important are these water features.
- Will your project alter the drainage of the area?
- Describe the likely impacts of your project on the wetland or river.
- Describe how you will minimise impacts on these water features.

Aboriginal and European Heritage

- Describe any significant Aboriginal site or European heritage site in the area.
- Describe the likely impacts of your project on these sites.
- Describe how you will minimise impacts on these heritage sites.

Dust/Noise

- Is your project likely to generate large volumes of dust/noise?
- Describe the likely impacts of dust/noise on the surrounding environment.
- Describe how you will minimise impacts of dust/noise on the surrounding environment.

Scenic Quality

- Describe the scenic quality of the area.
- Describe the likely impacts of your project on the scenic quality.
- Describe how you will minimise these impacts.

Rehabilitation

- This section should describe how you will rehabilitate the area during and after the completion of the operation.

HOW YOUR ACTIVITIES SHOULD BE MANAGED TO REDUCE ENVIRONMENTAL DAMAGE.

The following sections briefly outline some management principles to help minimise the environmental impacts of your proposal.

Clearing

The most important thing is to minimise disturbance to vegetation. Plan your operation so that the smallest possible area is disturbed by clearing, vehicle movement or soil stockpiling.

Do not remove large trees if it is not necessary for engineering or safety purposes.

Don't burn or remove cleared vegetation, it can be used to stabilise disturbed areas and provide a local seed source.

If one side of the road is more disturbed, can you carry out your proposal on that side of the road?

Fauna

Do you mean old or dead?

Where possible, do not remove logs, leaf litter or old trees as they provide habitat sites for fauna.

Don't allow pets into the work area as they chase and kill native fauna, introduce disease and pests and disturb vegetation.

Don't burn any cleared vegetation, as it can provide a habitat for smaller fauna.

Disease

Make sure that all your vehicles are clean and not bringing any dirt or mud into the work area. This can carry plant diseases, so it is important that all machinery is washed down before entering the area. You must also make sure that the vehicles are clean when they leave the site as any soil carried from the area may pose a threat to other areas.

If you need to bring in soil, either topsoil or fill material, make sure it comes from a disease free area.

Weeds

Make sure no seeds are carried on vehicle tires or in mud on vehicles and machinery.

Make sure soil brought into the area is weed free.

Fire

Do not light any fires in roadside areas.

Do not burn any cleared vegetation as this can spread to areas outside the roadside.
Be aware of the fire risk in your area and abide by any restrictions on equipment use.

Waste

Make sure bins are provided for all rubbish.

Don't leave any waste material in the roadside area, this includes not only daily rubbish (e.g. drink bottles or lunch wrappers), but any material linked to your operation (e.g. fuel or oil containers, piping, tape, wire etc..)

Clean up any spills of hazardous material (e.g. fuel, oil, chemicals, paints etc) and dispose of it in the approved local landfill or containment area.

Heritage

Do not disturb any Aboriginal or European heritage site. If you have received approval do not disturb a site, abide by any conditions placed on the approval.

Drainage

Make sure drainage water from your operations is kept within the roadside reserve and is managed to limit erosion.

Dust

Keep vehicles of disturbed areas or use water trucks to settle dust in these areas.

Noise

If you will be working close to houses limit the use of vehicles to day light hours.

FURTHER INFORMATION

Department of Environmental Protection
Westralia Square

Roadside Conservation Committee
50 Hayman Road
Como WA 6052

Department of Conservation and Land
Management

50 Hayman Road

Como WA 6052

Or your local CALM office.

Main Roads Western Australia

The Don Aitken Centre

Waterloo Crescent

East Perth WA 6004

Bush Fire Services

480 Hay Street

Perth WA 6000

Water Corporation

629 Newcastle Street

Leederville WA 6007

Agriculture Western Australia

3 Baron-Hay Court

South Perth WA 6151

Western Australian Municipal Association

15 Altona Street

West Perth WA 6005