Indigo Shire Council
Roadside Management Plan

Prepared by Indigo Shire Roadsides Committee April 2003

Indigo Shire

Roadside

Management

Plan

Indigo Shire Roadside Management Plan June 1999

Revised by Indigo Shire Roadsides Committee
April 2003

RECOMMENDATIONS from Plan Review

Overall, the Plan and its implementation have been successful and there have been positive changes noticed by Council and the community in the management of roadside management. However, some areas although clearly outlined in the Plan, have not been clearly understood by the public. It is these areas where further concentrated effort is required.

Priority actions

Promotion/education of landholders

1. Promote Roadside Management Plan with VFF, CFA, Landcare groups.
2. Conduct promotional and education campaign to ensure landholders understand the requirements for planting on roadsides.
3. Ensure landholders understand the requirements for clearing on roadsides.
4. Conduct promotional and education campaign to ensure landholders understand the requirements for cleaning up after storm damage from natural disasters on roadsides.
5. Ensure landholders are aware of requirements for grazing on roadsides through publicity and education program.

Vegetation protection and habitat management

6. Identify roadsides for regeneration/revegetation and rehabilitation of known threatened species communities, corridor links and high and medium conservation value roadsides.
7. Undertake training in vegetation assessment (using the Habitat Hectares model)
8. Incorporate EVC, Threatened Species Overlay on the Map of Roadside Conservation Values.
9. Ensure annual training for all shire roads workers and contractors for best practice management of native roadside vegetation.
10. Develop a program to raise community awareness about legal requirements and the impacts of firewood collection on roadsides.

Weed Control

11. Take full advantage of VicRoads funding for weed control on main roads.
12. Develop targeted weed control plan in consultation with VicRoads and DSE.
13. Revise and distribute weed brochure ensuring landholders are aware of their legal responsibilities.

Planning

14. Develop Local Planning Policy for Roadside Vegetation.
15. Develop Environmental Significance Overlay and Vegetation Protection Overlay in Council Planning Scheme to protect roadside vegetation and adjoining buffers.
16. Consider application of an Environmental Significance or Vegetation Protection Overlay that requires that a permit be obtained to clear native vegetation on high and medium conservation value roadsides.

Foreword

The Indigo Shire Council is pleased to present the Indigo Roadside Management Plan. The Plan has been developed by the Shire in partnership with the community and key stakeholders. It provides a framework for the management of roadsides across the Shire to protect and enhance biodiversity while meeting the needs of road and roadside users.

Roadsides are now used for more than just movement of vehicles, machinery and stock. Many services, such as phone and electricity, are located on roadsides. Broadscale clearing for urban and agricultural development has left an unexpected and valuable legacy of native vegetation on roadsides. In some areas, this may include some of the few remaining examples of intact vegetation, as found before European settlement. Roadside vegetation is also a link between isolated pockets of vegetation and provide fauna habitat and corridors. It is therefore essential that roadside vegetation is protected. However, this must be balanced against the needs of roadside users.

Council convened a Community and Agency Steering Committee, with representation of the diverse interests in roadside management, to provide input into development of the Plan. Public comment was also sought and incorporated into the document. The Plan therefore reflects the unique features of the Indigo Shire but is flexible enough to accommodate the needs of individual communities.

The Plan comprises objectives for managing the threats to roadside vegetation and protecting and enhancing vegetation. Actions for implementation aim to achieve this through improved co-ordination, education of the community and adoption of best practice. The key to the success of this Plan is identifying and developing innovative methods to attain these objectives.

The Indigo Shire Council believes that the Plan provides a balanced approach to roadside management and that its implementation will result in protection and enhancement of roadside vegetation that has a vital role to play in the future health and sustainability of the Shire.

Cr. Jan Palmer,

Chairperson, Roadside Management Plan Steering Committee

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This document was prepared by Carol Kunert Environmental Consultant for the Indigo Shire. The development of the Management Plan was originally made possible by the Murray Darling Basin Commission 2000 funding through the Natural Heritage Trust, and was administered by the Roadsides Conservation Advisory Committee of Victoria. The Plan was reviewed and updated in 2003

Acknowledgments

This Roadside Management Plan was developed in consultation with the Indigo Shire Roadsides Steering Committee. Thanks go to all those members who contributed their time, effort and expertise, and who returned three years later to be involved in the review.

Thanks also go to those members of the community who came along to the public workshops and openly expressed their views and were willing to listen to the views of others and later, provided comment on the draft report.

Understanding and tolerance form the basis for resolving the many uses of roadsides. The successful implementation of this plan will depend on the support of the community and the continuing goodwill that has been shown by all parties in the plan's development.

Carol Kunert
Facilitator for the development of the Roadside Management Plan

Glossary of terms

Road Reserve	The total strip of land reserved for transportation purposes from fence line to fence line or boundary to boundary if unfenced. The road reserve includes the roadside.
Road Formation	That portion of the road reserve along which vehicles travel. It includes the road pavement, shoulders and the area to the outermost side of the roadside drain, at least to where the drain batter meets the natural surface. This area includes the cut off drain.
Roadside	The strip of land between the road formation and the boundary of the road reserve which is usually also the boundary of the adjacent property.
Declared Road	Freeways, State highways, main roads, tourist roads and forest roads which are managed by VicRoads in accordance with VicRoads Roadside Management Plans.
Main Road	Roads that are managed by Council on behalf of VicRoads in accordance with the Shire Roadside Management Plan.
Unused Road	A road that has been gazetted under the Crown Lands Act where it is no longer used for public traffic. DPI/DSE then becomes the responsible authority.
Environmental Weed	A plant that colonises natural vegetation and threatens conservation values. It can be an exotic or native plant that is not indigenous to the area. They are so called, because their presence is in some way detrimental to the natural environment.

Remnant vegetation	Remaining native vegetation.
Roadside biological corridor	Connects isolated blocks of native vegetation and provides a strategic link for wildlife movement and serves as a gene pool for flora.
Indigenous Vegetation	Native vegetation that occurs naturally in a particular district including trees, shrubs, herbs and grasses.
Movement of Stock	Movement of stock (during daylight hours and not less than one km per hr) as part of everyday farming practices on a regular basis from one paddock to another or on an occasional basis from one paddock of property to another.
Droving of Stock	Droving of large numbers of stock from one location to another to change their grazing area, or droving in or through the Municipality by moving stock along roadsides for the purpose of feeding.
Grazing of Stock	Refers to grazing of a particular area rather than droving or stock movement and not to indiscriminate droving for supplementary feeding.
Firewood collection	The collection and removal of fallen timber. It does not refer to the felling of standing timber (alive or dead).
Fire break	Any natural or constructed discontinuity in a fuel bed used to segregate, stop, and control the spread of a wildfire, or to provide a fire line from which to suppress a fire.
Fuel reduced corridor	Assist to minimise the occurrence of initial spread of fire, enable establishment of control lines and provide a clear traffic route.
Priority access road	A road that is critical for an ensured transport route for travellers and provides a link between critical locations to reduce travel time for fire fighters.

Abbreviations

DPI/DSE	Department of Primary Industry/Department of Sustainability and Environment
CFA	Country Fire Authority
CMA	North-east Catchment Management Authority
RCAC	Roadsides Conservation Advisory Committee Victoria
MFPC	Municipal Fire Prevention Committee
MFPP	Municipal Fire Prevention Plan
VFF	Victorian Farmers Federation

Policy Statement

The Indigo Shire, in recognition of the conservation, functional, landscape, cultural and recreational values of its roadsides, has resolved to protect, maintain and where possible enhance them through:

- all works of infrastructure construction and/or maintenance, and any other activity, carried out on road reserves either managed or controlled by the Shire, being performed in accordance with the best practices detailed in the strategies and guidelines of the Indigo Shire Roadside Management Plan;

- the Roadside Management Plan being considered during all stages of an activity, from concept, planning, design and construction through to maintenance; and

- all persons involved in road planning, design, construction and maintenance undergoing a Shire approved Roadside Management Training Course.

SECTION A

BACKGROUND

1. Introduction

The Shire of Indigo covers some 2016 square kilometres and encompasses the main towns of Rutherglen, Chiltern, Beechworth and Yackandandah. The major farming activities are beef, sheep, dairy, fruit and viticulture. The Shire's historic and natural assets provide a base for tourism and recreational activities.

There is a diversity of landscape and vegetation types ranging from forested hilly terrain to broad agricultural river valleys and red gum floodplains. Within the Shire there are some 1800 kilometres of used roads. The majority of these roads are managed by the Shire. The Shire has a responsibility to ensure that roads not only provide for the safe movement of traffic, but also reflect community expectations for their wider use.

The establishment of the State Government's Flora and Fauna Guarantee Act in 1988 marked a change in the way we view native flora and fauna, with a commitment to protect native species and entire communities and to ensure that activities or processes that may threaten their survival are managed. Victoria's Biodiversity Strategy (1998) and, Victoria's Native Vegetation Management Framework and, at the local level the Regional Native Vegetation Plan provide ways of doing this to ensure that there is net gain of native vegetation and native fauna habitat. Roadside management plans are being developed throughout Victoria to address the conservation and management of native vegetation and associated fauna found along roadsides. The Biodiversity Victorian Planning Provisions (VPP) Practice Note illustrates mechanisms to protect significant vegetation identified in roadside management plans.

This Management Plan is concerned with roadsides, namely that strip of land between the road itself and the boundary of the road reserve (which is usually the adjacent property). The principle use of the road reserve is for the movement of people, goods and stock.

There are many uses of roadsides such as access to properties, provision of services such as electricity and telephone, recreational and scenic values; and they play an important role in the management of fires.

More recently roadsides have been recognised for their indigenous vegetation, and associated flora and fauna values, being an important component of biodiversity conservation. Roadsides provide pockets of remnant vegetation, a source of indigenous seed stock and corridors between isolated stands of indigenous vegetation. Such corridors link remnant vegetation on unused roads, strategic farm plantings, and riparian corridors through both public and private land, with larger blocks of remnant vegetation, both on private and public land. They provide the link between the various Broad Vegetation Types and are usually the last repository for many grassland species of both flora and fauna. Roadside vegetation often forms the most contiguous strip of remnant vegetation within a landscape, and although the quality may vary from highly disturbed to almost intact, they are home to many locally or regionally significant, rare or threatened communities or species.

A Roadside Management Plan was developed for the Yackandandah district in June 1994 and adopted as guidelines for the former Yackandandah Shire. An Interim Roadside Management Policy for the Indigo Shire was adopted by Council in October 1997.

This Roadside Management Plan was first completed in 1999 and covers all used rural roadsides within the Indigo Shire. The Municipal Planning Scheme addresses roadside management issues within the urban areas.

Public Purpose Reserves such as some wayside stops, water and camping reserves are sometimes located next to roads and may form a continuous area with the road reserve; however they are not included in this Plan. Unused Roads are also beyond the scope of this Plan, as the associated management and licensing arrangements require a separate focus.

The Plan provides a basis for the management of roadside flora and fauna across the Indigo Shire. In doing so it aims to promote:

- improved understanding of the importance of roadside indigenous flora and fauna;
- sound and sustainable management practices;
- coordinated management arrangements on roadsides;
- the implementation of on-ground projects and
- local ownership of the plan.

There is a direct link between this Plan for the Indigo Shire and the North-east Catchment Management Authority's Regional Roadside Management Strategy. The regional strategy is a strategic document that defines the regional issues facing roadsides and sets broad actions for their resolution. It sets into train a process for coordination and resolution of issues between municipalities and stakeholders with a region-wide interest, such as VFF, Country Fire Authority, TXU and VicRoads. This Plan on the other hand interprets the regional strategic directions at the local level and develops specific guidelines and actions for the Indigo Shire.

The plan was reviewed in late 2002 and this updated version incorporates public and agency comments and new or changes legislation and policies.

It draws on information from the Roadsides Conservation Committee of Victoria Guidelines, VicRoads Roadside Management Guide, VicRoads Roadside Handbook, North East Catchment Management Authority Regional Roadside Management Strategy, Yackandandah Roadside Management Plan and other documentation held by the Indigo Shire. Reference is also made to the CFA Roadside Fire Management Guidelines, NECMA Regional Code of Work Practice for Roadside Workers (1999), NECMA Native Vegetation Plan and City of Wodonga Roadside Vegetation Management Plan.

Plan development

The development of this plan was guided by a project steering committee comprising representatives from CFA, Department of Natural Resources and Environment (now Departments of Primary Industry/Sustainability & Environment), Eastern Energy (now TXU), environment groups, Indigo Municipal Fire Prevention Committee, Indigo Shire Council, Landcare groups, Roadsides Conservation Advisory Committee, Telstra, VicRoads and Victorian Farmers Federation. Appendix 1 contains further details.

The Plan was developed in three stages. The first stage reviewed the current management of roadsides vegetation through a literature review of legislation and local government policy. The second stage involved a series of community workshops to identify issues of concern. A draft plan was then developed with the Steering Committee. The third stage involved seeking endorsement of the strategy

from all stakeholders through public exhibition. The review of the Plan sought comment from Council and agency staff and from people who had been involved in the original process and those who were now involved in aspects of roadside conservation. Appendix 2 lists those people involved in the public consultation for both the plan and the review.

A separate summery document on the findings of the 2002/2003 review of the Plan is available from the Indigo Shire Office.

Responsibility for Management of Roadsides

Roadside management of main roads, freeways, highways, forest roads and tourist roads (also called declared roads) is the responsibility of VicRoads, whilst Local Government is responsible for local roads. However, both bodies must take into account legislative responsibilities of other agencies such as CFA, DPI/DSE and Service Providers under various Acts and Regulations. The adjoining landholder is responsible for the control of pest animals and regionally controlled weeds on local roads.
In this municipality VicRoads directly manages the Hume Freeway, Kiewa Valley Highway, and Murray Valley Highway. The Shire on behalf of VicRoads manages the other main roads. Any party considering undertaking works on roadsides must obtain permission from the relevant managing authority before commencement.

The following table summarises the major roadside activities and primary responsibilities on **local** (municipal) roads.

Activities	Organisation responsible		
	DPI/DSE	Local Council	Other (specified)
Firewood collection	•	•	
Road maintenance & grading		•	
Installation, maintenance and supervision of service installations		•	Service authorities eg Telstra, energy companies
Bridges and drainage		•	
Road signs, guard rails & markings		•	
Stockpile management		•	
Vegetation removal/pruning	•	•	
Rubbish/litter dumping		•	
Maintenance of wayside stops	•	•	
Fire management		•	CFA
Stock movement		•	
Revegetation	•	•	
Other conservation issues eg. preservation of wildlife corridors	•	•	
Pest plants and animals	•	•	Adjoining land owner

Table adapted from: Parliament of Victoria, Environment and Natural Resources Committee Report of Weeds in Victoria May 1998, p19

2. Management objectives

Roadside Management Planning (RMP) is undertaken for the following reasons:

To protect:

- existing indigenous flora and fauna communities with particular emphasis on rare or threatened species
- cultural or heritage assets
- community assets from fire

To enhance:

- indigenous flora and fauna communities with particular emphasis on rare or threatened species

To maintain:

- safe function of the road
- existing indigenous flora and fauna communities fauna and existing corridors
- visual amenity and landscape qualities
- water quality

To minimise:

- land degradation
- spread of and/or elimination of weeds and vermin
- spread of soil borne pathogens
- risk and impact of fire
- roadside litter
- site specific conflicts
- maintenance costs
- disturbance during installation and maintenance of service assets

3. Roadside conservation value categories

All rural roadsides throughout the Indigo Shire have been classified into high, medium and low conservation values. These ratings were assigned to each roadside or section of roadside after being assessed using the Roadsides Conservation Advisory Committee's Victoria (RCAC) assessment process. The assessments were undertaken in the period 1996 - 1998 by field naturalists Eileen Collins and Scott Jessup on behalf of Indigo Shire.

The RCAC assessment process identifies conservation values based on roadside width, fauna habitat, degree of regeneration, wildlife corridor, weed cover, site disturbance and presence of rare flora and fauna species. Appendix 3 shows the data assessment sheet.

It is important to recognise that roadside assessment is not an end in itself, rather that the conservation status of any roadside may change over time depending on how it is managed. For example a roadside rated as low could go to medium conservation status or vice versa. Also, the assessment provides only a snapshot of the roadside at a particular time and may not cover all plant species. Thus assessments need to be reviewed periodically.

CATEGORY	DESCRIPTION
HIGH CONSERVATION	A high conservation value roadside or section of roadside may have the following characteristics - a relatively pristine vegetation community, the presence of a rare, threatened or significant flora species, a faunal area, a section of remnant vegetation not common locally, or an area of cultural, historical or geological importance.
MEDIUM CONSERVATION	A medium conservation value roadside or section of roadside may include areas of semi-natural indigenous vegetation with some introduced grasses and other plants. This category also includes modified vegetation with extensive regeneration or a wide road reserve with patches of remnant vegetation which could be enhanced for wildlife.
LOW CONSERVATION	Roadsides or sections of roadsides designated as being of low conservation value have been substantially modified and are now predominantly exotic pasture grasses and other weeds. Some indigenous vegetation, usually eucalypts and wattles and some scattered clumps of native grasses may exist.

A map of the conservation values for the Shire is contained in Appendix 3.

The current 3-tier conservation rating system provides a coarse evaluation of roadside condition. It does not provide enough recognition of the conservation status, condition and conservation significance of different patches of native vegetation on roadsides. The medium rated category in particular can include a broad range of vegetation condition. DPI/DSE is introducing a habitat hectare assessment as part of the statewide Native Vegetation Management Framework and considerations should

be given to opportunistic reassessments of roadside conservation status using this system.

Different management techniques will be required for maintaining the conservation values in each of the above categories. For example areas of low conservation value could be grazed or slashed for vegetation management, however in high conservation value roadsides, a greater emphasis on weed control, and for example, burning as a method of vegetation management and regeneration may be required. It is feasible that the status of any given road may change either way over time, however the objective of ongoing management should be to improve conservation status; and thus roads should be managed appropriately.

4. Legislative context

Several Strategies, Acts of Parliament and Government Policies have an impact on roadside management.

Agricultural and Veterinary Chemicals (Control of Use) Act 1992

Regulations relate to matters such as spray drift, commercial operators licences, agricultural chemical users' permit, registration requirements for chemicals and chemical control areas. A Code of Good Practice for Farm Chemical Spray Application has been produced by Agriculture Victoria.

Archaeological and Aboriginal Relics Preservation Act 1972

Aboriginal and archaeological sites are protected.

Beechworth District Local Conservation Strategy 1996

Provides environmental recommendations for future Council decision making and sets priorities for actions to be taken for the Beechworth area of the Shire.

Catchment and Land Protection Act 1994

Identifies responsibility for the control of noxious weeds on roadsides. Adjacent landholders must control Pest Animals and Regionally Controlled weeds on municipal-controlled roadsides (excluding highways, Declared Roads and Unleased Crown land). The Department of Natural Resources and Environment is responsible for pest animals and weeds on public land. The Act also regulates the movement of machinery from land onto a road and removal of soil, sand, gravel or stone in relation to the control of noxious weeds.

Conservation, Forests and Lands Act 1987

Prior to works being undertaken which may disturb *critical* habitat (as defined under the Flora and Fauna Guarantee Act) a plan of works must be submitted to the Department of Natural Resources and Environment.

CFA Act 1958

Municipalities are responsible for managing roadside vegetation to reduce the fire threat to life and property. Although most fire prevention works on roadsides are exempt from the Native Vegetation Clearance Controls under the Planning and Environment Act, fire prevention planners must have *due regard* to indigenous vegetation values.

The documents *Roadside Fire Management Guidelines* (CFA 2001) and *CFA guidelines for Planting on Roadsides* provide background information for achieving the balance between fire prevention and native vegetation protection on roadsides.

Crown Land Act 1958

Allows prosecution for unauthorised cutting or removal of timber from roadsides. All timber on roadsides is the property of the Crown and royalties may be payable on any timber taken from roadsides. The Department of Natural Resources and Environment issues permits for firewood collection. This Act also defines an unused road which is where the municipality has notified DPI/DSE that a road is not required for public traffic. DPI/DSE then becomes the responsible authority for unused roads.

Crown Land (Reserves) Act 1978

Gives Crown ownership rights over all vegetation on roadsides.

Electrical Safety Act 1998

The Code of Practice for Powerline Clearance (vegetation) 1999 controls the clearance required between trees and powerlines for safety and powerline protection. Powerline companies and their contractors must comply with this code for tree clearing and pruning activities.

Under the code there are requirements to describe, map and plan important vegetation and procedures for consultation, negotiation and agreement prior to commencement of works.

Environment Protection Act 1970

Provides for the control of polluted runoff from disturbed roads.

Environment Protection and Biodiversity Act 1999

Promotes the conservation of biodiversity by listing species and communities that are of national environmental significance. Also covers identification of key threatening processes and protection of critical habitat.

Extractive Industries Development Act 1995

A license/works authority is required to remove stone, gravel, sand etc from public land. There are exemptions that relate to roadworks. The Act is administered by the Department of Natural Resources and Environment.

Flora and Fauna Guarantee Act. 1988

Public authorities must have regard to flora and fauna conservation and management objectives which are:

- to guarantee that Victoria's flora and fauna can survive, flourish and retain their potential for evolutionary development in the wild;
- to conserve Victoria's flora and fauna communities; and
- to manage potentially threatening processes.

Forests Act, 1958

Gives local municipalities responsibility for managing vegetation on most roadsides.

Litter Act 1964

Makes it an offence to litter roadsides.

Local Government Act 1989

Gives local government responsibility for management of undeclared roads. Gives Council power to create certain local laws relating to roadsides. Indigo Shire has developed local law No 8 *Control of Livestock.*

NECMA North East Native Vegetation Plan

The Plan establishes a strategic framework that will guide the management of native vegetation in the Region and sets targets for protection of native vegetation that can be used in the consideration of land use development proposals.
The Plan's objectives are to:

- Provide a reference document for the status of vegetation communities in the Region, particularly on private land.
- Determine strategic directions for the protection and enhancement of native vegetation across the catchment including the establishment of regional targets for vegetation classes.
- Develop priorities and criteria for protection and enhancement of remnants and replanting of native vegetation for biodiversity and land and water degradation purposes.
- Identify gaps in the existing knowledge base on native vegetation and identify best management practices for native vegetation retention, regeneration and planting across the catchment.

It applies the Net Gain Principle which is where losses of native vegetation and habitat are balanced by commensurate gains.

Planning and Environment Act 1987

The Victorian Planning Provisions (VPP) established under the *Planning and Environment Act* contain provisions governing the removal of native vegetation from roadsides under the *Native Vegetation Retention Controls* and seeks to encourage the retention of native vegetation on private and public land.

Prior to removing, destroying or lopping native vegetation on any roadside a permit must be issued by the responsible authority (in most cases the local council). A permit to remove native vegetation unless exempted under the provisions (refer Appendix 6) must be issued by the responsible authority. All applications for permits to remove native vegetation on roadsides must be referred to the Department of Sustainability and Environment. Local planning schemes under this Act may have vegetation clearing limits that are more stringent that those in the State Section. If this is the case, then the more stringent requirement applies.

Exemptions apply to CFA, Councils and to Service providers to undertake particular works on roadsides. Refer to Appendix 6 for further details. A permit is also required for the grazing of stock and the clearing for fencelines on roadsides.
Within the VPP the State Planning Policy Framework (SPPF) sets out principles for land use and development planning including policies for environment and management of resources. The objective of the Conservation of native flora and fauna policy is:

> ***'to assist the protection and conservation of biodiversity, including native vegetation retention and provision of habitats for native plants and animals and control of pest plants and animals.'***

The general implementation instructs the responsible authority to have regard to a range of National, State and regional strategies particularly Native Vegetation Plans and roadside management strategies.
The SPPF seeks to ensure that the objectives of planning as described in s4 of the *Planning and Environment Act* (1987) in Victoria are fostered.

The Local Planning Policy Framework contains the Municipal Strategic Statement (MSS) and Local Policies. The MSS contains the strategic planning, land use and development objectives of the Council:

Local Policies can also provide detailed directions regarding land use and development. They either relate to specific areas or local issues and should have their origins in the MSS.

The VPP has also introduced a standard set of zones that control the use of land and overlays that control development of land. eg. Environmental Significance Overlay, Vegetation Protection Overlay and Significant Land Use Overlay.

Road Safety (Road Rules - Give Way to Stock) Regulations 1997

Requires drivers (who pass a give way to stock sign) to travel at a safe speed and give way to stock, and/or stop at stock crossings where stock graze or are driven along, or cross roads. The law also requires certain standard signs to be displayed by the person controlling the stock.

Servicing Acts

Permits servicing authorities to locate assets on roadsides and gives them rights of access for maintenance works.

State Conservation Strategy 1987

Seeks to integrate conservation with other activities and recognises the value of roadside vegetation. It commits the government to prepare roadside management plans.

State Biodiversity Strategy 1998

The Strategy is part of the Flora and Fauna Guarantee Program and sets out how to achieve the FFG Act's objectives. The strategy aims to:

- increase awareness of the need to conserve biodiversity;
- enable continued development of partnerships between the community, industry and government in the custodianship of our biodiversity;
- indicate the existing and proposed mechanisms for achieving the objectives of flora and fauna conservation and management in the context of ecological sustainability;
- detail strategic frameworks to prevent further loss of habitat and a focus for better management of existing habitats and the continuation of natural ecological processes;
- highlight the habitats and environments that require urgent attention; and
- highlight major threatening processes.

The Strategy divides the State into a number of bioregions (or biogeographic regions) and assesses the indigenous vegetation and habitat using Broad Vegetation Types that can be related to current and pre-European coverage.

Summary Offences Act 1966

This law states that it is unlawful to obstruct droving (ie to be mischievious) but many councils also pass local laws to regulate how the droving shall be undertaken. Section 4 of the Act prohibits the lighting of fires in public open spaces.

Telecommunications Act 1997

Telstra's Corporate Environmental Plan provides strategies for the planning, installation and maintenance of services, including those relating to environmental matters and community and government consultation. Schedule 3 of the Act relates to Carriers' powers and immunities and has special provisions for threatened species, environmental impact assessment and other environmental matters.

Transport Act 1983

Sets out responsibilities for roads. VicRoads is responsible for management of declared roads (freeways, highways, main roads, tourist roads and forest roads). Councils are responsible for works and maintenance of most main roads as agents of VicRoads.

Victorian Weeds Strategy 1999

Gives reference to the preparation of roadside management plans as a means of sharing responsibility for weed control. Other actions relate to greater enforcement provisions, self assessment procedures to reduce spread of weeds along roadsides by farm machinery and road maintenance equipment, development of regional action plans, public land management and role of local government in weed control.

SECTION B
ROADSIDE MANAGEMENT OBJECTIVES, GUIDELINES AND ACTIONS

Note unless otherwise stated the timeframe in the actions tables follows a financial year (eg: 2003 - 2004 means June 2003 to June 2004).

1. EDUCATION AND AWARENESS

Guidelines:

- Roadside management needs to recognise the many different (and often conflicting) needs of the community.
- Promote the value of roadside flora and fauna to road users, managers and adjoining landowners.
- Encourage community ownership of this Roadside Management Plan.

Priority	Action	Responsibility	Timeframe
1	Promote Plan with VFF, CFA, Landcare groups and service providers.	Council, appropriate government departments	Ongoing
2	Develop a roadside litter awareness program as part of waste education strategy..	Council	Ongoing
3	Conduct promotional activities that will: • improve awareness of roadside vegetation and habitat and its values • raise the profile of community groups contributing to the implementation of the plan eg local media • provide background and technical information to sections of the community such as schools and groups • particular emphasis to be placed on case studies and award system.	Council, with Keep Australia Beautiful Rural Pride Program	Ongoing
4	Identify and promote the plan in terms of benefits and costs.	Council	Ongoing
5	Respond and record all inquiries regarding the Plan and evaluate as detailed in the section on Plan implementation and monitoring.	Council	Ongoing
6	Conduct promotional and education campaign to ensure landholders understand the requirements for grazing, weed control planting, and requirements for cleaning up after damage from natural disasters (such as storms) on roadsides.	Council	ASAP

Conservation Issues

2. NATIVE VEGETATION

Objective: to protect and enhance indigenous vegetation along roadsides with particular emphasis on threatened flora and fauna communities.

2.1 Remnant vegetation

Objective: to protect and enhance existing conservation values of indigenous vegetation.

Note: Remnant Vegetation refers to remaining native vegetation on roadsides.

Indigo Shire covers a diverse area with three distinct biogeographic regions (bioregions) that contain 35 different vegetation types or communities known as Ecological Vegetation Classes (EVCs). Bioregions are used for biodiversity planning, management and monitoring.

There are several EVCs that are listed as high priority for protection and management by the North-East Catchment Management Authority due to the highly depleted or threatened nature of the vegetation type.

These EVCs are greatly depleted in comparison to what existed prior to European settlement, their loss coinciding with agricultural development and the mining boom of the region. Of those remnants that exist, the most intact communities are often found along linear reserves such as roadsides, stream reserves and disused rail reserves. Roadsides therefore provide important linkages in joining such remnants together. Associated with these vegetation remnants are indigenous fauna whose status is often rare or threatened and who rely on these last vestiges of indigenous habitat.

The conservation status of EVCs that are rated as Endangered or Vulnerable are shown in the table below. For a complete listing of EVCs and their conservation status refer to Appendix 7.

Conservation Status of Ecological Vegetation Classes found in Indigo Shire

CONSERVATION STATUS IN BIOREGION			EVC_DESCRIPTION
Highlands - Northern Fall	**Northern Inland Slopes**	**Victorian Riverina**	
	V		Riparian Shrubland
E	E		Valley Grassy Forest
E	E	E	Plains Grassy Woodland
	E		Floodplain Riparian Woodland
	V	V	Box Ironbark Forest
	E	E	Alluvial Terraces Herb-rich Woodland
E	E	E	Creekline Grassy Woodland
	E	E	Wetland Formation
E	E		Spring Soak Woodland
	E	E	Alluvial Terraces Herb-rich Woodland/Creekline Grassy Woodland Mosaic
V	E		Swampy Riparian Woodland
	E	E	Alluvial Terraces Herb-rich Woodland/Plains Grassy Woodland Complex
	E		Alluvial Terraces Herb-rich Woodland/Valley Grassy Forest Complex
D	E	E	Grassy Woodland
	E	E	Plains Grassy Woodland/Rainshadow Grassy Woodland Complex
	E		Plains Grassy Woodland/Valley Grassy Forest Complex
	E		Plains Grassy Woodland/Valley Grassy Forest/Rainshadow Grassy Woodland Complex
	E		Valley Grassy Forest/Box Ironbark Forest Complex
	E	E	Gilgai Plain Woodland/Wetland Mosaic
E	E		Rainshadow Grassy Woodland /Valley Grassy Forest Mosaic
	E	D	Riverine Grassy Woodland/Riverine Sedgy Forest/Wetland Mosaic
		E	Sand Ridge Woodland
		E	Pine Box Woodland

E .	endangered	< 10 of pre-European extent remains (or a combination of depletion, loss of quality, current threats and rarity that gives a comparable status)
V .	vulnerable	10 - 30% of pre-European extent remains (or a combination of depletion, loss of quality, current threats and rarity that gives a comparable status)
D .	depleted	> 30% and up to 50% of pre-European extent remains (or a combination of depletion, loss of quality, current threats and rarity that gives a comparable status)

* full definition in Victoria's Native Vegetation Management - Framework for Action

Sourced from S Berwick Dept Sustainability and Environment, Benalla

2.2 Native Vegetation Management

Many specific threatening processes have been identified by DPI/DSE for species listed under the *Flora and Fauna Guarantee Act* that may pose a significant threat to the survival, abundance or development of any taxon, community or flora or fauna.

The following threats are characteristic of the main pressures exerted on native vegetation in the North East Catchment:

- ❖ Habitat clearing, fragmentation and isolation

- ❖ Incremental loss of remnant vegetation which leads to further fragmentation
- ❖ Modification to natural disturbance regimes (grazing, flooding, fire and nutrients)
- ❖ Disruption to biotic composition (introduction of species, local or complete extinction of species, changes in the distribution and abundance of native species)
- ❖ Weed invasions (environmental woody, perennial grass and broad-leaf weeds in particular)
- ❖ Feral animals
- ❖ Loss of hollow-bearing trees and disturbance to understorey (timber harvesting, logging, firewood)
- ❖ Loss of ground habitat (collection of fallen timber, removal of understorey)
- ❖ Rural tree decline ("dieback" as a result of isolation, increased nutrients, high water tables etc)
- ❖ Rising groundwater, salinity
- ❖ Changed grazing regimes
- ❖ Change flow regime and stream temperature.

Source: Draft NE Regional Vegetation Plan 2000 (p26).

As a general rule, management should aim to maintain or enhance the values of each conservation value category with the following emphasis:

High Conservation Value Roadside: manage for threatened communities, and/or rare or threatened species if present or if it forms a part of their habitat. Maintain native vegetation communities and animal habitat by minimal disturbance and roadside activity. Weed and pest animal control is a priority and vegetation enhancement if required. Ensure natural regeneration of indigenous plant species. Leave fallen timber in road reserve. Manage for identified rare or threatened species, if present. Follow the actions and guidelines of existing Action Statements or Recovery Plans where they exist for a species (obtainable from DPI/DSE).

Medium Conservation Value Roadside: manage for native vegetation and habitat to be at least maintained. Encourage natural regeneration, enhancement of understorey, replanting of gaps and weed control. Leave fallen timber in road reserve.

Low Conservation Value Roadside: seek opportunities to control or eradicate weeds. Enhance or revegetate identified strategic habitat links.

For specific management of fallen timber resulting from damage from natural disasters refer to ***guidelines Section 9 Firewood Collection & Timber and Seed Harvesting p37.***

2.2.1 Slashing guidelines:

Workers undertaking roadside slashing programs or fire prevention programs should consider the following:

High Conservation Value Roadsides

- Design slashing programs to begin with clean machinery in high conservation value areas and work towards the more degraded sites and ensure that all slashers and machinery are cleaned before moving from weed infested to clean areas.
- Avoid slashing native grasses and associated plants (orchids, lilies, daisies, etc) during the time that they grow, flower and set seed. This will vary between species and sites and will be dependent on the particular season. For example: Spring-growing native grasses (eg. Wallaby, Spear, Tussock-grass) and herbs should not be slashed between September and late December. Annual slashing is not encouraged. Seek advice from Council/DPI/DSE or other suitable qualified experts for detailed slashing requirements. Adopt the mosaic principle for slashing where possible.

General

- Ensure that slashing operations meet requirements for fuel reduction on designated fuel reduced roadsides/control lines (Refer to MFPS).
- Areas with indigenous shrubs and groundlayer are likely not to have been previously slashed, therefore slashing should not be introduced as a management technique for these sites. Consider burning on approved regimes (eg 7-15 years depending on vegetation type for shrubby areas) as an alternative to slashing as in most cases burning results in less damage to native vegetation.
- Indigenous understorey should not be slashed unless specified in the Municipal Fire Prevention Strategy. On the years that slashing is required for fire prevention purposes, it should be undertaken at a time and in a manner that enhances growth of indigenous understorey and avoids regenerating trees and shrubs.
- Identify and slash around areas where there are regenerating seedlings of overstorey (eg. eucalypts) except in clear zones.
- Where slashing is necessary, slash at a height that will achieve both fire prevention and conservation objectives. It is preferable that indigenous vegetation be slashed no lower than 200 mm above ground level to avoid damage to soil and plant roots and prevent invasion of the site by exotic grasses or weeds.
- Where possible, slashing should occur before seed set of exotic grasses and after seed set of indigenous understorey species and at a time specified by the relevant Council Officer. Review time of slashing annually according to the requirements of the season.
- Slashing is the preferred biomass control technique for low conservation value grassy sites.

Refer also Section 14.2: Slashing p47.

2.2.2 Grazing Guidelines:

Refer to Section 15.3 Farming and Associated Activities: Grazing p49.

2.2.3 Burning Guidelines:

Context:

- All burning on roadsides requires Council permission for Council managed roads or VicRoads permission for the major highways to address road safety needs.
- The curing of vegetation by herbicide spraying before burning is not permitted.

Guidelines:

People planning or undertaking burning programs should consider the following:

High and Medium Conservation Value Roadsides

- Where burning has been an existing practice for fire prevention over many decades, continue the practice unless scientific research into the management of known flora and fauna at the site indicates otherwise.
- The frequency of burning for sites with native shrubs will depend on the biology of the species. This may be 10 or 15 years or even greater for some species. Ecological burns should be for species which naturally regenerate by fire/smoke. Sites with senescent native shrubs and lack of natural regeneration should be the priority.
- The burning of Kangaroo Grass dominated grasslands should be encouraged. Frequent burning of grasslands is preferable to infrequent burning, however the frequency will vary depending on the type of grass, for example:
    - Kangaroo grass dominated grasslands optimal every 1 – 4yrs
    - Wallaby/Spear grass dominated grasslands optimal every 3 – 5 yrs
    - Poa dominated grasslands optimal 5-8 yrs.
- Burn sections of grassland and woodlands on a rotating basis where possible to allow for regeneration, refuge and diversity of habitat (mosaic burning).
- Burn to control exotic grass growth as an alternative to slashing.
- Do not burn sites with *Phalaris* and environmental weeds that may be encouraged by fire (for example Blackberry, Broom, Gorse and Tree- Lucerne) unless part of a strategy involving follow-up chemical or other control.

Refer also Section 10 Fire Prevention p39.

2.3 Specific Vegetation Communities

Native Grasslands (Grasslands that comprise native grasses and herbs and generally have little or no overstorey) In Indigo Shire they are found predominantly in the western region of the Shire.

Guidelines:

- Encourage regeneration in high and medium conservation value roadsides.
- Encourage rehabilitation in low conservation value roadsides.
- Do not plant any trees or shrubs in grasslands, rather encourage restoration of indigenous grassland species.
- No ploughing or ripping to occur in native grasslands.

- Refer also to burning and slashing guidelines above.

Grassy Woodlands (Woodlands that have a Eucalypt/Casuarina overstorey with an understorey of native grasses and herbs) Grassy Woodlands are found in the Northern end of the Shire (Brimin, Rutherglen etc), and along River flat country.

Guidelines:
- Strategic grazing may occur on sites previously grazed, taking into above guidelines for grazing refer Section 15.3 Farming and Associated Activities: Grazing p49.
- Any regenerating saplings are to be protected from grazing.
- Burning using a mosaic approach and at a frequency of every five to seven years will allow for regeneration, refuge and diversity of habitat.
- Refer also to burning and slashing guidelines above.

Box Ironbark Woodlands (Woodlands that have a Eucalypt overstorey of principally Box and Ironbark species and shrubby understorey of wattles and other shrubs with a few native grasses and herbs).

Guidelines:
- Infrequent burning may be beneficial to encourage regeneration of some species.
- Refer also to burning and slashing guidelines above.

Wetlands
Guidelines:
- Consult Council, DPI/DSE and NECMA before undertaking new works on roadsides(eg drain construction) which may affect a wetland.
- Avoid any activities that affect levels and flood flows.
- Avoid planting trees in shallow wetlands if they do not naturally occur.
- Design roadside drainage systems to ensure the road formation is protected and the water level of the wetland is not altered. Take measures to prevent erosion, siltation and sedimentation of wetlands from drainage from roads and rail embankments.

Seek alternatives to herbicide control of weeds in the wetland catchment.

Priority	Action	Responsibility	Timeframe
1	Undertake training in vegetation assessment (using the Habitat Hectares model)	DPI/DSE, Council	2003 -05
2	Ensure ongoing reassessment of roadside conservation values, especially for high and medium categories.	Council	ongoing
3	Collate Habitat Hectare scores for individual roadside sites currently rated as medium.	Council	2003 -05
4	Incorporate EVC, Threatened Species Overlay on the Map of Roadside Conservation Values.	DPI/DSE, Council	2003 - 04
5	Incorporate above guidelines into all work practices and management prescriptions for roadsides.	Council, service providers	ongoing
6	Consult with DPI/DSE to develop site specific vegetation management prescriptions where required.	Group undertaking the works	ongoing
7.	Develop Local Planning Policy for Roadside Vegetation	Council	2003-04
8.	Develop Environmental Significance Overlay and Vegetation Protection Overlay in Council Planning Scheme to protect roadside vegetation and adjoining buffers.	Council	2003-04

2.4 Habitat Management for Rare, Threatened and Significant Flora and Fauna

Objective: to protect and enhance populations of rare, threatened and significant flora and fauna.

Any roadside or section of roadside that contains threatened fauna or rare or threatened flora species receives a high conservation value rating under the roadsides assessment. There are several threatened species that occur in the Indigo Shire. Threatened animal species include the Grey-crowned Babbler (*Pomatostomus temporalis*), Regent Honeyeater (*Xanthomyza phrygia*), Apostlebird (*Struthidea cinerea*), Swift Parrot (*Lathamus discolor*), Barking Owl (*Ninox connivens*), Brush-tailed Phascogale or Tuan (*Phascogale tapoatafa*), and Squirrel Glider (*Petarus norfolcensis*). Rare or threatened plants include Argyle Apple (*Eucalyptus aff. cinerea*), Buloke (*Allocasuarina luehmannii*), Deane's Wattle (*Acacia deanei*), Broom Bitter-pea (*Daviesia genistifolia*), Hairy Hop-bush (*Dodonaea boroniifolia*), Long-leaf Emu-bush (*Eremophilia longifolia*), Purple Diuris (*Diuris punctata*), Smooth Darling-pea (*Swainsona galegifolia*), Snow Gum (*Eucalyptus pauciflora ssp. pauciflora*), Tick Indigo (*Indigofera adesmiifolia*), Trailing Shaggy-pea (*Podolobium procumbens*), Warby Range Swamp Gum (*Eucalyptus cadens*), Water-bush (*Myoporum montanum*), Weeping Pittosporum (*Pittosporum phillyreoides*), White Cypress Pine (*Callitris glaucophylla*) and Yarran (*Acacia omalophylla*).

Some of these species have an "Action Statement" prepared under the *Flora and Fauna Guarantee Act*. These provide detailed information on the species and the required actions to ensure their survival and continued existence. Regionally significant species include those species which are common elsewhere in the State, or outside the Municipality, but are either at the edge of their distribution or are uncommon or very localised in the Municipality.

Guidelines:

- Before commencement of design plans for roadworks etc, the Map of Roadside Conservation Values should be consulted to determine the presence of threatened, significant flora and fauna species.
- Consultation with DPI/DSE should occur to determine best practises to prevent or limit impacts on threatened flora and fauna
- When a rare, vulnerable or significant flora species is located or thought to be present on a roadside, DPI/DSE should be contacted for advice to determine appropriate action
- Minimise activities which may impact on known significant flora and fauna.
- Limit the use of herbicides, ploughing, spoil dumping or grading in the vicinity of rare, threatened or significant species or communities.
- Consult DPI/DSE for advice with regards to burning regimes where fuel reduction is required as a component of Municipal Fire Prevention Plans.
- Do not permit firewood collection on High or Medium value roadsides unless fallen timber presents a safety hazard or fire hazard. The fire hazard is defined by the MFP Officer in consultation with the MFPC or individual CFA brigade officers.
- Develop an alternative site specific management approach where traditional management approaches are known to affect flora and fauna values.

Priority	Action	Responsibility	Timeframe
1	Identify and maintain a record of rare, threatened or significant fauna, flora or plant communities in the municipality, on the Roadside Conservation Values Map. . If necessary (or appropriate) indicate location on the ground by: • on site markers (eg small wooden stake tipped in orange paint or RCAC environmental markers) • fencing off the area • significant communities road signs	Council, DPI/DSE	ongoing
2	Consult with DPI/DSE prior to preparation of plans and commencement of construction or maintenance works where works have the potential to disturb rare, threatened or significant flora.	Service providers, Council	ongoing
3	Create an overlay of significant flora and fauna locations on the Map of Roadside Conservation Values.	DPI/DSE, Council	2003
4	Incorporate above guidelines into all work practices and management prescriptions for roadsides.	Group undertaking the works	ongoing
5	Monitor and review as part of MFPSs, changes in locations or status of rare and threatened species.	MFPC	ongoing

Refer also to guidelines Section 7 Road Construction and Maintenance p33, Section 9 Firewood Collection & Timber and Seed Harvesting p 37,Section 14 Pest Plants and Animals p 45.

2.5 Biological Habitat Corridors

Objective: to retain and enhance habitat and corridor requirements on roadsides.

Guidelines:

- Where possible encourage the development of new biological corridors on unused roads or on areas away from roadsides.
- Where intact areas of indigenous vegetation on roadsides exist, protect these roadsides for wildlife movement and habitat by:
    - avoid 'tidying up' roadsides unless they pose a recognisable safety hazard or are in conflict with the Municipal Fire Prevention Plan. Allow some natural debris to remain for habitat and do not stack fallen timber as this could provide harbor for pest animals.
    - consult with DPI/DSE /CFA when significant habitat areas occur on strategic firebreak roads, to minimise disturbance to the habitat.
- Roadsides that form strategic biological corridors should be encouraged to regenerate naturally, or be given first priority in revegetation and rehabilitation programs.
- Contact DPI/DSE where a rare, vulnerable or significant species of fauna is located on any roadside.
- Dead trees provide critical habitat for hollow dwelling species. Removal of these trees should not be seen as an automatic right by road managers unless they constitute and immediate risk to the community. Consult with DPI/DSE prior to removal of dead trees.
- Ensure that road managers, (including VicRoads) discuss with DPI/DSE prior to the removal of hazardous limbs and dead trees.
- Retain fallen dead trees or limbs containing hollows on site or moved to another site, such as a Strategic Corridor Link or Wildlife area, where they can continue to provide habitat.
- When significant habitat areas occur on strategic firebreak roads, consult with the Municipal Fire Prevention Committee/DPI/DSE to minimise disturbance to the habitat.
- On high and medium conservation value roadsides:
    - Retain all habitat components, such as leaf litter, rocks and crevices, trees with hollows, naturally fallen limbs and dead and decaying vegetation, standing pools and marshy land, unless they pose a significant safety hazard or fire hazard. The fire hazard is defined by the MFP Officer in consultation with the MFPC or individual CFA brigade officers.
    - Leave natural vegetation undisturbed and not tidied up unless it conflicts with other sections of this Plan.
- Revegetation/regeneration programs should be undertaken in low conservation value section of roadsides where there is a high proportion of high and medium conservation values in the area and the roadside is recognised as a biological corridor.

Priority	Action	Responsibility	Timeframe
1	Identify strategic biological corridors that will create continuous links within and between other corridors (ie fill the gaps) and between babbler habitat.	Council, DPI/DSE	2003 - 04
2	Protect biological corridors by minimising disturbance to the identified sites	Group responsible for the works	ongoing
3	Incorporate above guidelines into all work practices and management prescriptions for roadsides.	all works managers	Ongoing

Refer also to guidelines Section 3 Revegetation and Rehabilitation p26, Section 7 Road Construction and Maintenance p 33, Section 9 Firewood Collection p37, Section 14 Pest Plants and Animals p45.

2.6 Grey Crowned Babbler Habitat

Note: the Grey-crowned Babbler is an endangered species of bird which is listed as threatened under the Flora and Fauna Guarantee Act. Indigo Shire has a key role to play in this species' survival, as the Shire includes a major part of the third largest population of Grey-crowned Babblers left in the State. In addition, 95% of all Babbler groups found in the Shire (about 40 groups in total) live in roadside vegetation, making the Shire the principal land manager responsible for their conservation. The majority of Babbler sites in the Shire are found in the Rutherglen and Chiltern districts in an area roughly bounded by the Hume Freeway, Murray River Boundary Road and West Boundary Road.

The habitat requirements for the Babbler are:

- ♦ almost continuous tree cover, predominantly large Box trees. They feed on eucalypt bark and in the older trees, on rotting limbs for insects,
- ♦ scattered tree cover or woodlots in adjacent paddocks with short and sparse ground cover,
- ♦ a scanty ground layer of short grass and leaf and bark litter which the birds search for insects. Patches of dense grasses such as Phalaris can therefore limit their feeding opportunities by preventing access to the litter layer,
- ♦ an understorey of young Eucalypts, Native Pines, Bulokes or Wattles for nest sites and shelter.

Guidelines:

- In identified Grey Crowned Babbler areas:
  - Prevent grazing to allow regeneration of saplings unless it can be demonstrated that conservation values will not be affected.
  - Firebreaks will not be ploughed except those designated as strategic firebreak roads. Before undertaking any works on these roads consult with DPI/DSE to determine appropriate actions.

Priority	Action	Responsibility	Timeframe
1	Follow up babbler sightings and identify sites for conservation of an area of approximately 1 km along each roadside site, on both sides of the road.	DPI/DSE/Council	ongoing
2	Revegetate roadsides identified in above action if required.	Council	ongoing
3	Eliminate Phalaris patches in Babbler roadsides to increase the area of ground-feeding habitat and to reduce fuel loads.	Council	ongoing
4	Revegetate roadsides between Babbler Sites to provide habitat links.	Council, landcare groups	ongoing
5	Review management actions and habitat requirements on a regular basis and adjust as necessary.	Council, DPI/DSE, CFA	annually

Refer also to guidelines Section 3 Revegetation and Rehabilitation p26.

3. REVEGETATION AND REHABILITATION

Objective: to re-establish indigenous vegetation along identified roadsides.

Guidelines:

- Do not use plants that are known environmental weeds (refer Appendix 5).
- Encourage natural regeneration in High and Medium Conservation Value roadsides and restoration of indigenous grassland species by such techniques as protection from threatening processes, weed control, and burning, as is appropriate to the site. Avoid planting any trees or shrubs in grasslands.
- Revegetation/regeneration programs should be undertaken to:

  a) supplement missing life forms (usually understorey and ground cover species)

  b) link sections of high and medium value roadsides. Use only indigenous species in High and Medium Conservation Value Roadsides.
- Roadsides that form strategic biological corridors should be encouraged to regenerate naturally, or be given first priority in revegetation and rehabilitation programs with greatest effort going to those corridors that have short connections between habitats.
- In low conservation value roadsides (that do not contain more that 25% exotic understorey species), encourage management activities which in the long- term will lead to an increase in the conservation value of that roadside.
- Wherever possible protect revegetated areas from stock.
- Encourage indigenous vegetation planting on roadsides outside the town limits.
- Refer to the revegetation guide for NE Victoria by Fleur Stelling and other similar publications eg Springhurst Tree Group Guide and Maurie Smith's guide for Yackandandah for suitable species.
- When undertaking revegetation programs ensure the following:

    - Plantings reflect the vegetation community found, or likely to have occurred, at the site. Refer to the EVC mapping available from DPI/DSE or Council. The Pre-European Ecological Vegetation Class mapping and searches of the surrounding remnants will assist in determining the vegetation communities and plant species.

    - Comply with Council's Landcare Support and Environment Policy.

    - Obtain permission from Council (for local roads) or VicRoads (for declared roads). Council will give guidelines on planting requirements such as road safety, fire prevention needs and service provider's requirements.

    - Plantings comply with CFA *Guidelines for Planting on Roadsides*.

    - Ensure follow up maintenance and protection of trees.

- DSE's Managing Your Patch of Bush – provides benchmark lists of species appropriate for each EVC.

Priority	Action	Responsibility	Timeframe
1	Provide advice as required by group/person undertaking planting.	Council, DPI/DSE	ongoing
2	Encourage regeneration and rehabilitation by giving pest and weed control high priority.	DPI/DSE, CMA, Council Group undertaking the works	ongoing
3	Identify roadsides for regeneration/revegetation and rehabilitation. Priority to be given to Grey-crowned Babbler sites, other known threatened species communities, corridor links and high and medium conservation value roadsides and incorporate into the Planting Plan. Where possible establish plantings in high recharge areas and plant across the slope to assist with salinity control,	DPI/DSE, Council, adjoining landowners	ongoing
4	Undertake revegetation and rehabilitation programs. Programs will be undertaken in accordance with standard methodologies as specified by NECMA.	Council, landcare groups, adjoining landholders.	Ongoing
5	Encourage landowners to consider regeneration of land adjoining high conservation value roadsides.	Council, landcare groups	Ongoing
6	Incorporate above guidelines into all work practices and management prescriptions for roadsides.	Group undertaking works.	Ongoing
7.	Develop guidelines for recommended roadside species for plantings, (not environmental weeds)	Council	2004 - 05

Refer also to guidelines Section 2 Native Vegetation Management p15, Section 12 Visual Amenity and Landscape Issues p43.

3.1 Tree Planting Programs

Context: As the roadside is public land, all tree planting programs on roadsides require written permission from the Council.

Guidelines:

- When planning a tree planting program consider:
  - the surrounding Ecological Vegetation Class (check with DPI/DSE)
  - refer to the revegetation guide for NE Victoria by Fleur Stelling and other similar publications for suitable species
  - follow up maintenance and protection of trees
  - ensuring that the movement of traffic (eg walkers) along the roadside is not impeded
  - allowing for intersection clear zones, fire prevention works, service providers requirements. Check if there are underground services (Telstra, Gas etc) located where planting is proposed
  - using indigenous species (preferably of local provenance) in groupings and spacing determined after consultation with DPI/DSE , local fire brigade, adjoining land owner and Municipal Fire Prevention Officer. Ensure spacing every 100 metres along the plantation for fire prevention access. Planting groups should include both overstorey and understorey layers. For high conservation value areas, only indigenous species should be used.
  - using indigenous grasses or indigenous ground covers rather than introduced species where the sowing of grasses occurs.

Priority	Action	Responsibility	Timeframe
1	Plant with species indigenous to the Ecological Vegetation classes found on the site.	Group undertaking works.	ongoing
2	Ensure planting plan meets requirements of other road users eg local CFA Brigade, VicRoads Obtain permission from Council (for local roads) or VicRoads (for declared roads).	Group undertaking works.	ongoing
3	Develop education program to increase awareness of Native Vegetation Retention Controls on roadsides.	DPI/DSE	ongoing

Refer also to guidelines Section 2 Native Vegetation Management p15, Section 12 Visual Amenity and Landscape Issues p43 and Section 10 Fire Prevention p39.

3.2 Native Vegetation Removal

Objective: to limit the extent of damage caused by vegetation removal and to ensure that only the minimum vegetation is removed.

It is recognised that it may be necessary at times to remove vegetation to provide safe driving conditions, to protect service assets on roadsides, to provide driveway access to properties and/or to minimise fire risk. However unless it is an emergency situation removal of vegetation on roadsides must be referred to DPI/DSE through the planning process. Road managers must investigate other means of making roads safe ie use of barriers, guard rails and not consider that tree removal is the only option available.

Guidelines:

- Prior to removing, destroying or lopping native vegetation on any roadside a planning permit must be issued by the Responsible Authority. All applications for permits to remove native vegetation on roadsides must be referred to the Department of Primary Industry/Sustainability and Environment (being the responsible authority for crown land).
- Clearing for fencelines on roadsides also requires a permit from the Department of Primary Industry/Sustainability and Environment.
- Mark vegetation which is to be removed or lopped prior to work commencing and inspection by the relevant Shire Officer and DPI/DSE officer.
- Give DPI/DSE sufficient lead time to be involved in discussions with road managers prior to commencement of works ie at least 2 weeks notice.
- Remove only the minimum vegetation necessary to meet the required works.
- Retain dead trees and naturally fallen limbs on the roadside to provide habitat for wildlife unless they pose a significant safety hazard or fire hazard. The fire hazard is defined by the MFP Officer in consultation with the MFPC or individual CFA brigade officers.
- Fall vegetation in the direction that minimises damage to surrounding vegetation (this is usually a requirement of permit conditions).
- Where possible, operate all vehicles and machinery from:
  - the road formation
  - a cleared area
  - cleared private land with the consent of the owner.
- Maintain existing clearance distances unless inadequate for the class of road. In general, the area kept clear of vegetation will be the existing road formation (including table drains) with a 5 metre height clearance. Consider other options (eg road narrowing or realignment) before clearing high and medium conservation value roadsides.
- Where at all possible recycle felled material, if not required for habitat by chipping and returning to site to be used in rehabilitation works (or make available for community projects) or stockpile in a cleared area and make available for firewood when appropriate.
- Do not chip any weeds that may be capable of spreading eg Cotoneaster or Privet.
- Retain larger felled vegetation containing hollows on site or move to another area where wildlife habitat is needed.
- Burn or dispose on site felled material if it cannot be recycled. If burnt on site it must be burnt 10 metres from any tree canopy, and avoid any indigenous shrubs and indigenous grasses and burnt to completion.
- Retain tree stumps that remain after felling on designated high and medium conservation value roads, provided that they are not a hazard for utility services or fire prevention.
- Leave tree stumps at least 1.2 metres high so as to be visible to maintenance or fire fighting vehicles.
- Remove damaged and fallen trees and root balls resulting from clearing or storm damage if they are a safety hazard, a potential fire risk, a harbour for vermin, etc.

Priority	Action	Responsibility	Timeframe
1	Ensure that anyone undertaking vegetation removal has a permit and is aware of the requirements of this Roadside Management Plan.	CFA, Council, Service Providers and individuals doing works.	ongoing

Refer also to guidelines Section 2 Native Vegetation Management p15.

3.3 Site Specific Management

Context:

Where general adherence to the guidelines in this Roadside Management Plan is not sufficient to resolve conflicting situations, to protect and encourage indigenous vegetation and meet functional needs of a road, site specific management plans may be needed.

This may occur where:

- roadsides are designated as strategic or secondary firebreaks as specified in the Municipal Fire Prevention Plan (MFPP);
- overhead power lines exist;
- power assets and strategic fire breaks have been combined on high conservation value roadsides;
- service authorities assets are located on the roadside;
- it affects public safety; or
- road widening and road construction activities are necessary.

Guidelines:

- Develop site specific management plans.

Priority	Action	Responsibility	Timeframe
1	Inspect with relevant agencies	Council and agencies	ongoing
2	Prepare site specific management plan	Council	ongoing
3	Incorporate site plan into Roadside Management Plan	Council	ongoing

Refer also to guidelines Section 2 Native Vegetation Management p15.

4. ROADSIDE MARKING OF SPECIAL ENVIRONMENTAL AREAS

Objective: to alert roadside workers and/or the community to significant roadside sites.

Note: The RCAC in cooperation with VicRoads have developed a system of signing, recording and education to help protect special environmental areas. Three levels of signage are available:

- `*Significant Roadside Area':* Designed to alert travellers, road workers and local people to the value of the roadside.
- `*Environmental Marker':* For discrete marking of special sites to alert road workers, fire brigade members and adjacent landowners without the need to draw attention to the general public.
- *'High Conservation Value Roadside marker':* Similar to the environmental marker with an educational message.

Four sites in the Shire have already been nominated for roadside signage on sections of:

- Chiltern - Beechworth Road
- Ingrams Rock Road
- Reids Way
- Beechworth - Wodonga Road

Sites for signage may be nominated by any person or group for consideration and possible signage by the road manager.

Guidelines:

- Identify areas of rare, threatened or significant flora and fauna or other significant sites located on roadsides.
- Record and provide the location, status and management of the site to the managing authority for registration. This information to be provided to any group wishing to undertake works on roadsides.
- Develop a management plan in consultation with DPI/DSE and the local community, field expert or the site nominator.

Priority	Action	Responsibility	Timefra me
1	Identify areas of special environmental significance for marking,	Council/CMA/DPI/DSE	ongoing
2	Develop a management plan for each site.	Council	ongoing
3	Erect signs as funds become available.	Council/interest groups	ongoing

FUNCTIONAL ISSUES

5. UNUSED ROADS

Unused Roads will not be discussed in detail in this Plan, as the associated management and licensing arrangements require a focus separate from the issues associated with used roads. If an application is made to DPI/DSE to close a road, than the Shire is advised for comment.

6. ROAD USERS

A number of impacts on roadsides can come from passing traffic such as litter from vehicles and trailers, and weed spread from stock and hay transporters.

Guidelines:

- Council will lead by example in its approach to road use and will encourage incentives such as positive feedback to responsible road users.

Priority	Action	Responsibility	Timeframe
1	Continue support of WasteWise Education Strategy.	Council	ongoing
2	Ensure Council laws on rubbish dumping and covered loads are publicised and enforced with more *cover your load* signs..	Council	2004
3	Educate road users about the values of and impacts on roadsides, especially during firewood season.	Council	2004
4	Incorporate litter removal and clean up requirements in tender documents for roadside works.	Council	ongoing
5	Expand litter prevention taskforce involving council and community workers from Chiltern Box Ironbark Festival to other festivals and areas..	Council	2004
6	Encourage a “take litter home” policy via education and appropriate signage at specific wayside stops..	EcoRecycle, Council	2004

Refer also to guidelines Section 14 Pest Plants and Animals p45, Section 11 Wayside stops p42, Section 12 Visual Amenity and Landscape Issues p43.

7. ROAD CONSTRUCTION and MAINTENANCE

Objective: to ensure a safe and efficient road system whilst ensuring minimum disturbance to roadside indigenous vegetation.

Context:

Road management practices can disturb indigenous vegetation either directly or by changes such as the grading of overburden soil over intact vegetation and altering drainage patterns. Road machinery may also facilitate weed and pathogen spread. There is also increasing public expectation that roadside workers will use best management practices in regard to roadside vegetation management.

During routine maintenance activities, removal of young growth and suckering vegetation (less than 10 years old) is often required along the road formation and in the drainage lines. It should be noted that such activities are exempted under the Native Vegetation Retention Controls.

Indigo Shire's *Code of Work Practice Road Construction and Maintenance Workers* provides detailed management guidelines for road construction and maintenance workers. It covers road construction and widening, stockpile sites, site rehabilitation, grading, drainage, tree and shrub management, grass mowing and weed control.

Guidelines:

Workers undertaking roadside maintenance and construction programs must consider the following: Refer to tender documentation adherence.

- Prior to commencement of works, identify the conservation values of the adjoining roadside from the Shire's conservation value assessment map.

- Design works to prevent or minimise impacts on native vegetation, especially high or medium conservation value sites. When proposed roadworks are likely to impact on sites of high and/or medium conservation value, cultural or heritage significance, or may affect the amenity of adjacent landholders, consult with persons experienced in conservation, cultural and heritage matters. Refer to list of significant roadsides of high and medium conservation values and if in doubt consult relevant Council officer.

- Where sight lines are required to be maintained on road intersections, slash sight lines and in the long term, consider replanting with low growing indigenous shrubs or where appropriate, native grasses to reduce maintenance requirements.

- Refer to the Shire's *Code of Work Practice Road Construction and Maintenance Workers* for detailed management guidelines.

Priority	Action	Responsibility	Timeframe
1	Include in all tender documents for works of construction and maintenance on roadsides and in private subdivisions specifications requiring all works comply with this Roadside Management Plan.	Council	ongoing
2	Include in all relevant tender documents requirement for a revegetation plan.	Council	ongoing
3	All Council Staff and contractors to attend a roadside management training course, offered each year.	Council	annually
4	Ensure that the guidelines of the Roadside Management Plan are included as a requirement in all road work specifications carried out by relevant authorities.	Council/Service Providers	ongoing
5	Provide all statutory authorities and contractors undertaking roadworks with a list and location map of designated stockpile sites.	Council	ongoing
6	Investigate appropriate techniques of seeding roadside batters with native grasses.	Road Manager	ongoing
7	Ensure that restoration works are undertaken before the contract is completed.	Council/Service Providers	ongoing

8. SERVICE PROVIDERS

Objective: to minimise disturbance to indigenous roadside vegetation during installation and maintenance of service assets.

8.1 Installation and Maintenance of Services - Power, Communications, Water, Sewage and Gas

The *Code of Practice For Powerline Clearance [Vegetation] 1999* sets out requirements for clearing activities by relevant authorities. Municipalities are responsible for powerline clearing in *declared* (urban) areas in compliance with the *Electrical Safety Act 1998*. Powerline clearances in *undeclared* (non urban) areas are the responsibility of the electrical distribution companies unless delegated to another body.

Schedule 3 of the *Telecommunications Act 1997* outlines procedures and conditions for the installation and maintenance of communications.

Part 7 of the *Gas Industry Act 2001* allows for any trees obstructing a pipeline to be felled or removed.

Guidelines for Service Providers:

- Where possible plan works one year in advance to allow proper planning, consultation and collection of seed for vegetation rehabilitation.
- Where conflict exists over the installation of services and conservation of roadside vegetation, arrange a site inspection by all interested parties. Consult with affected landholders and local residents with specialist knowledge. Inspections to be arranged by the proponent and should occur at the appropriate time of year to allow identification of vegetation.
- Locate services, where appropriate, on low conservation value roadsides or cleared land adjacent to roadsides.
- Consider all options to minimise vegetation loss when vegetation removal is proposed on high or medium conservation value roadsides.
- Plan routes based on best available knowledge to take into account:
    - State or Shire policies or agreements
    - Significant flora and fauna information
    - Sites of cultural or heritage significance
    - Maps and guidelines (as detailed in the Roadsides Management Plan)
    - Codes of Practice of relevant agencies.
- Where existing indigenous vegetation is disturbed, rehabilitate the site to (as close as practical) the condition prior to commencement of works.
- After working in weed or disease affected areas clean vehicles and machinery of all soil and plant debris prior to working on high/medium conservation value sites or weed free sites.
- Remove all litter and rubbish (both personal and works related) away from the site at the completion of works, or burn on site if an appropriate cleared area is available.

- Consider provision of replacement plants to compensate for any native vegetation removed during installation works.
- Following trenching works, reinstate roadsides by consolidating backfill and replacing topsoil. Stabilise with indigenous grass seed or sterile rye grass.
- Ensure that staff and contractors involved in the installation or maintenance of services are instructed in vegetation management and rehabilitation techniques.
- Ensure all works of construction and maintenance carried out by, or under contract for any Utility Service provider follow the policies and guidelines outlined in this Roadside Management Plan.

Priority	Action	Responsibility	Timeframe
1	Seek an undertaking from all service providers to have regard to the requirements of this Roadside Management Plan and to inform all their contractors.	Council	– ongoing
2	Provide code of Work Practices for Roadsides to regional service providers and their construction and maintenance workers.	Council	– ongoing
3	Ensure Service Providers are informed about, and are aware of the intent in this Strategy and are encouraged to undertake works on roadsides to comply with Council's guidelines.	Council	– ongoing
4	Ensure that the guidelines of the Roadside Management Plan are included as a requirement in all work specifications carried out on roadsides in the Shire.	Council/Service Providers	98 ongoing
5.	Create clause in Council Planning Scheme to state that "the Responsible Authority to inform relevant authorities of significant roadside vegetation to protect important vegetation and habitat linkages". This clause to be in new local policy called "Roadside Management"	Council	2003

Refer also to guidelines Section 3 Revegetation and Rehabilitation p26 and Section 3.2 Native Vegetation Removal p28.

Guidelines for Power Companies:
In addition to the above guidelines any vegetation removal must be undertaken in accordance with the 'Code of Practice For Powerline Clearance [Vegetation] 1999'.

- Rather than severely prune trees (eg cut to near ground level) growing directly under any power lines, encourage:
  - reassessment of these pruning practices
  - removal of the tree and replacement with a species that doesn't require such drastic pruning requirements.

Refer also to guidelines Section 3 Revegetation and Rehabilitation p26 and Section 3.2 Native Vegetation Removal p28.

9. FIREWOOD COLLECTION, AND TIMBER AND SEED HARVESTING

Objective: to minimise the reduction in wildlife habitat and damage to indigenous vegetation by minimising the removal of firewood from roadsides.

Context

The Federal Government has endorsed a national approach to firewood collection and use (through Australia & New Zealand Environment Conservation Council) in June 2001. A State Firewood Strategy is currently being developed by DPI/DSE. The discussion paper notes that the majority of wood cut and collected from public land is done illegally and there is a low level of awareness about the impact of firewood collection on the environment. It is also difficult to enforce permits. There will most likely be greater pressure to harvest timber from roadsides as other sources become less available. However the removal of fallen and standing dead timber can remove valuable animal habitat. It is recognised that timber that falls onto fences or onto the roads can be a safety hazard and needs to be removed if causing immediate danger.

The Native Vegetation Retention Controls make it illegal to remove any living vegetation. A permit is required for the removal of fallen timber and the collection of firewood from roadsides. Standing dead trees cannot be felled. Permits are also required to burn timber on roadsides and for indigenous seed collection. Approvals will be based on equity and protection of the regeneration potential of rare, threatened or regionally significant species.

A North East Community Seedbank has been established to provide locally native seed and information on all aspects of seed collection, extraction and storage. It also provides training to interested groups.

Guidelines:

- Collection of firewood will not be allowed on high and medium conservation value roadsides. The exception is timber that has fallen onto property fences or presents an immediate safety hazard or fire hazard. The fire hazard is defined by the MFP Officer in consultation with the MFPC or individual CFA brigade officers.
- Prevent the removal of major habitat trees.
- Collection of firewood is not permitted on roads managed by VicRoads.
- Guidelines for seed collection are provided by the seedbank to ensure genetic integrity and minimal disruption to the site. Contact seedbank coordinator on 0417 338 435 or email necma@necma.vic.gov.au.

Priority	Action	Responsibility	Timeframe
1	Continue the 'one stop-shop' to provide permits for firewood collection.	DPI/DSE	ongoing
2	DPI/DSE to issue site specific permits for firewood collection.	DPI/DSE	ongoing
3	Conservation assessment map to be reviewed and updated as required with regard to areas for firewood collection.	Council	as required
4	Clearly sign post any piles of timber left in cleared area for public removal, with advice of permit	Council	as required

	requirements.		
5	Develop a procedure to deal with fallen timber and damage on roadsides from natural disaster events (storms, fires, floods)	Council/DPI/DSE	2004
6	Identify areas to restrict firewood collection where this activity currently is, or potentially would be threatening habitat and conservation values.	Council	as required
7	Seek adoption of best practices for management of timber cut during municipality and service provider maintenance operations.	Council	2003, ongoing
8	Investigate more efficient enforcement of the current system.	DPI/DSE	2003-04
10	Develop a program to raise community awareness about legal requirements and the impacts of firewood collection on roadsides	DPI/DSE/Council	2003
11	Support the North East community seed bank collection program.	Council	ongoing

Refer also to guidelines Section 3.2 Native Vegetation Removal, Section 2.4 Rare, threatened and significant flora and Fauna and biological habitat corridors p21.

10. FIRE PREVENTION

Objective: to manage roadsides to:

- ***to minimise the occurrence and the danger of the spread of fires on roadsides[1],***
- ***to minimise adverse impacts of fire on road users***
- ***to assist in the suppression of fires***

Guidelines:

- Undertake all fire prevention works on roadsides in accordance with the Municipal Fire Prevention Plan.
- Consult with DPI/DSE prior to carrying out fire prevention works on High Conservation Value roadsides designated as Fuel Reduced Corridors or Priority Access Roads to identify and ensure adequate protection is given (by the responsible authority) to rare, threatened and significant flora and fauna species
- Carry out fuel reduction works to ensure minimal damage or disturbance to native vegetation and fauna.
- Whenever possible locate Fuel Reduced Corridors on roadsides of low conservation value or private property.
- Consider appropriate treatment to minimise effect on native flora and fauna where the roadside and adjoining private property are both of high conservation value (and no alternative exists for relocating a firebreak).
- Identify and ensure adequate protection is given (by the responsible authority) to rare, threatened and significant flora and fauna species prior to any fire prevention works on roadsides designated as Fuel Reduced Corridors.
- Encourage planned ecological fuel reduction burns as these provide valuable opportunities for CFA brigade members to train in fire fighting techniques.
- Groups undertaking tree planting programs must consult with local fire brigade and MFPO. Ensure spacing every 100 metres along the plantings for fire prevention access. Refer also to Section 3.1

Aim to ensure a balance of works to achieve fire prevention.

Suggested options include:

Burning:

- Consider burning as an alternative to slashing (unless site conditions indicate otherwise) as in most circumstances burning results in less damage to native vegetation.
- Where burning has been an existing practice, continue the practice unless scientific research into the management of known flora and fauna at the site indicates otherwise.
- Ensure that burning practices where possible consider the frequency, intensity and seasonality requirement of native vegetation.
- Fire prevention programs should employ burning to achieve both fire prevention and conservation objectives.

[1] In order to fulfil Council's responsibility under Section 43 of the CFA Act for fire management on roadsides.

Slashing:

- Carry out slashing at a time that:
  - addresses fire prevention needs;
  - retards the growth of exotic grasses and prevents seed set;
  - enhances the growth of indigenous understorey;
  - encourages seed set of indigenous vegetation.
- Design slashing programs to begin with clean machinery in high conservation value areas and work towards the more degraded sites and ensure that all slashers and machinery be cleaned before moving from weed infested to clean areas.
- Identify areas of regenerating indigenous vegetation and slash around.
- Avoid annual slashing of indigenous understorey (unless indicated otherwise in the Municipal Fire Prevention Plan).

Ploughing and Grading:

The effectiveness of bare earth fire breaks depends on the width of the break, the fire intensity and the presence or absence of trees within 20 metres. and the vegetation immediately adjoining the zone. Hence zones in the freehold side within a grazed paddock can be more effective than in an ungrazed roadside. Impacts of these practices are direct loss of native vegetation, changes to the soil structure with the potential for erosion, weed invasion which may lead to a more flammable vegetation and the potential for the spread of weeds and soil-borne diseases. It is very unlikely that there will be any regeneration of native vegetation after ploughing as weeds rapidly out compete the natives. Also the practice creates a maintenance requirement to plough annually. Other forms of fire prevention treatment should be investigated. [2]

Roadside ploughing on VicRoads managed road reserves requires a permit. VicRoads generally encourages landholders to construct fuel reduced zones (firebreaks) on their own land adjacent to the road.

- Do not construct any new ploughed or graded firebreaks on high or medium conservation value roads unless there is no other viable alternative and it can be demonstrated that known conservation values will not be affected.
- Use ploughing or grading of roadsides only as an ancillary measure to fuel reduction burning on Fuel Reduced Corridors. These works should be subject to the approval of the Municipal Fire Prevention Officer and in accordance with the Municipal Fire Prevention Plan.
- Prepare a site specific management plan where there is considered conflict between fire management objectives and conservation objectives.
- Where the roadside is of high conservation value and the adjoining private property may also have conservation values (and no alternative exists for relocating a Fuel Reduced Corridor), consider the appropriate treatment to minimise effect on native flora and fauna.

Herbicides:

- Avoid the indiscriminate use of herbicides on roadsides. Limit their use to spraying:

[2] CFA Roadside fire management Guidelines (undated)

- for selective control of particular weeds where no alternative method of control is appropriate;
- control growth of exotic grass and weed on firebreaks (in accordance with the MFPP);

- Notify adjoining landholders prior to spraying the roadside.
- Consider alternative methods to reduce fuel loads and maintain weed free firebreaks (see burning, slashing or grazing).

Grazing:

- Consider grazing as a method to reduce fuel loads on low conservation roadsides consisting only of exotic grass species or weeds. (Note all grazing on roadsides is subject to a permit).

Priority	Action	Responsibility	Timeframe
1	Refer to the Roadside Management Plan overlay for the conservation values of roadsides and sites of rare, threatened or significant flora or fauna.	Council through the MFPC	ongoing
2	During preparation and review of Municipal Fire Prevention Strategy review the effectiveness of existing and proposed roadside fuel breaks and the possibility of relocating strategic and tactical fuel breaks away from high conservation roadsides.	MFPC	Annual review
3	Undertake education and promotion of conservation issues of the Roadside Management Plan to CFA personnel and volunteers.	Council	ongoing
4	Promote the CFA *Guidelines For Roadside Fire Prevention* to road managers and adjacent landholders	Responsible Authorities	ongoing
5	Co-opt a person with ecological expertise to the Municipal fire Prevention Committees (Northern and Southern) to provide information on local flora and fauna as needed.	MFPC	ongoing
6	Within the Municipal Fire Prevention Strategy, consider grazing as a method to reduce fuel loads on low conservation roadsides consisting mainly of exotic grass species or weeds and on medium conservation roadsides where it can be demonstrated that known conservation values will not be affected.	MFPC	Ongoing
7	Ensure that spraying of roadsides is carried out in accordance with the appropriate regulations.	Spray operator	ongoing
8	Evaluate and monitor fire prevention works in consultation between the CFA and DPI/DSE to determine the effect of works on both the conservation values and fire management.	MFPC, DPI/DSE	as required
9	Map High Conservation Value Roadsides with overlay of Priority Access Roads and review annually to develop specific conservation management requirements.	Council	2004 and annual

Refer also to guidelines Section 2 Native Vegetation Management. p15, Section 14 Pest Plants and Animals p45 and Section 9 Firewood Collection p37.

CULTURAL AND RECREATIONAL ISSUES

11. WAYSIDE STOPS

Objective: to provide safe and enjoyable stopping places for road traffic.

Note: Public Purpose Reserves such as some wayside stops, water and camping reserves are sometimes located next to roads and may form a continuous area with the road reserve, however they are not included in this Plan.

Guidelines:

- Select suitable locations for a wayside stop on roadsides after a site inspection and consultation with the Council, the facility designer, the Department of Natural Resources and Environment and any other relevant authority.
- Locate wayside stops to complement any natural, scenic, cultural or historic features on the roadside and the distance from one stop to another.
- Determine the type of wayside stop suitable for the area after considering a number of factors including impact on flora and fauna, environmental issues, fire risk and road safety. Ensure that the local fire brigade is consulted prior to the installation of fireplaces.
- The facility should be designed in a manner to have the least impact on existing remnant vegetation and to minimise vegetation loss.

Priority	Action	Responsibility	Time frame
1	Select suitable sites for wayside stops.	Council, VicRoads	ongoing
2	Rehabilitate existing wayside stops where necessary.	Council, VicRoads	ongoing
3	Construct as appropriate educational signage at wayside stops to highlight the value of roadsides.	Council, VicRoads	2004
4	Encourage a “take litter home” policy via education and appropriate signage through NevRwaste program.	EcoRecycle, Council, VicRoads	2004

Refer also to guidelines Section 2 Native Vegetation Management p15, Section 10 Fire Prevention p39 and Section 6 Road Users p32.

12. VISUAL AMENITY AND LANDSCAPE ISSUES

Objective: to maintain and enhance the visual amenity and landscape quality of the road and roadside.

Guidelines:

- Ensure that high conservation value roadsides are maintained and that medium value roadsides are enhanced. Give highest priority to main roads and entrances into towns.
- Consider opportunities to provide visual amenity in the design of:
  - restoration and revegetation projects,
  - wayside stops, stockpile sites.
- Record and preserve significant landscapes and significant trees. These can be nominated for inclusion in the register of classified and recorded landscapes and significant trees kept by the National Trust of Australia (Victoria).
- Design and manage roads to blend in with the surrounding landscape.
- Record and protect Avenues of Honour or planting of exotic species recognised as significant.

Priority	Action	Responsibility	Timeframe
1	Map the location of Avenues of Honour, plantings of son GIS database significant species and significant landscapes	Council, VicRoads	2005
2	Support the roadside clean up program as part of EcoRecycle and NevRwaste programs.	Council, VicRoads	- ongoing
3	Seek grants from EcoRecycle Victoria for litter control and education & promote Adopt-a-Highway Scheme	Council, VicRoads	ongoing
4	Remove rubbish from roadsides regularly when funding permits.	Council, VicRoads	ongoing
5	Ensure that Avenues of Honour are maintained to avoid becoming neglected and untidy.	Council, VicRoads	ongoing
6	When fencing is carried out ensure that all fencing materials are removed from roadsides.	Landowner, Council, VicRoads	ongoing
7	Support and plan projects for Clean Up Australia Day	Council	ongoing

Refer also to guidelines Section 7 Road Construction & Maintenance p33 and Section 3 Revegetation and Rehabilitation p26.

13. CULTURAL AND HERITAGE ISSUES

Objective: to protect the cultural and recreational values of roadsides.

Guidelines:

- Formally recognise and protect sites of cultural or heritage value. This includes indigenous and post-contact European sites.
- Contact the VAS when any new archaeological sites are found or thought to be found on roadsides in the municipality.
- Any works that will require new soil disturbance off alignment must first be approved by Aboriginal Affairs Vic.
- Contact the Historic Branch of the DPI/DSE and refer to the Indigo Heritage Identification Study for any information regarding historic sites on Roadsides in the Shire.

Priority	Action	Responsibility	Timeframe
1	Investigate state government funding and assistance to develop a register of sites of cultural or heritage value located on roadsides	Council	2004

LANDCARE ISSUES

14. PEST PLANTS AND ANIMALS

Objective: to control and prevent the further spread of weeds on roadsides and to control pest animals with minimal disturbance to indigenous roadside vegetation.

14.1 Pest Plants (Weeds)

Responsibility for control of weeds on roadsides:

Weed Category	Roadside type	Responsibility	Level of Control
State prohibited weeds	All Land	Department of Natural Resources and Environment	Eradication
Regionally prohibited weeds:	Declared Road (Freeway or Highway)	VicRoads	Eradication
	Declared Road (most main roads)	Mostly Shire on behalf of VicRoads	Eradication
	Undeclared Roads (other open roads)	Department of Natural Resources and Environment	Eradication
Regionally controlled weeds:	Declared Road (Freeway or Highway)	VicRoads	Prevent growth & spread
	Declared Road (most main roads)	Mostly Shire on behalf of VicRoads	Prevent growth & spread
	Undeclared Roads (other open roads)	Adjoining landowner or leasee	Prevent growth & spread

Lists of regionally prohibited and regionally controlled weeds and environmental weeds are contained in Appendix 5.

Note: The use of chemical types and times of use are restricted in Chemical Control Areas around viticulture and horticulture areas in the Shire.

Guidelines:

- Ensure that the type of weed control undertaken is appropriate for the site, roadside conservation values, and weeds present.
- Give priority to weed control on high and medium conservation value roadsides.
- Obtain advice from DPI/DSE prior to undertaking control of new species of weeds.
- Refrain from using plants known to be environmental weeds in any landscape project by the Shire and other authorities (refer Appendix 5).
- Undertake joint weed control programs with adjacent landholders when weeds are also a problem on private land.

- Weed control by ploughing, cultivation or broad acre herbicide use, is prohibited on all roadsides.
- Consider cut and poison and tree injection methods for selected weeds.
- Methods for disposal of noxious weeds may include:
  - disposal at a municipal disposal site
  - burning on site (without harming other indigenous grasses, shrubs or overstorey) or in a cleared area
  - destroying and leaving on site (but only if they cannot re shoot).
- Avoid removal of weeds in seed unless there is no alternative.
- If it is necessary to remove weeds in seed, dispose of at a designated disposal site and cover during transportation to prevent weed seeds blowing away and colonising new areas.
- Weeds in seed can be burnt on site if weather conditions allow.
- Where possible remove weeds in high conservation value roadsides using minimal disturbance techniques.
- Clean vehicles and machinery of all soil and/or plant debris (capable of growing or spreading seed) after working in weedy areas (eg after working on a site with Paterson's Curse during flowering and seeding) and before working on high or medium conservation or weed free sites. Vehicle hygiene is critical when working in areas which contain major outbreaks of noxious weeds.
- Wherever possible obtain soil for road maintenance from weed free sites.

Priority	Action	Responsibility	Timeframe
1	Revise and distribute weed brochure ensuring landholders are aware of their legal responsibilities..	Council	2003
2	Take full advantage of VicRoads funding for weed control on main roads..	Council	2003, ongoing
3	Concentrate efforts on 1. eradication of Serrated Tussock and 2. control of Chilean Needle Grass, St Johns Wort, Blackberry, Alligator Weed, Chinese lettuce, Gorse, Broome, Blackberries, Privet, Bridal Creeper, woody weeds and 3. environmental weeds such as Phalaris and 4. other plants likely to create serious weed infestations. In accordance with North East Regional Weed Action Plan.	DPI/DSE, land holder, Council and VicRoads	ongoing
5	Develop prioritised weed eradication program for main roads managed by Council in accordance with priorities detailed in action 3 above.	Council	ongoing
6	Encourage DPI/DSE to educate stock and hay transporters of the dangers of weed spread.	Council	2005
7	Consult with Power Authorities to ensure line clearance activities include minimisation of spread of environmental weeds.	Council, DPI/DSE	ongoing
8	Encourage weed control by landowners by developing joint initiatives with Landcare groups etc.	DPI/DSE, Council	ongoing
9	Monitor sites of recent works for any regrowth or new growth of weeds and undertake follow up control where necessary.	Group responsible for works	ongoing
10	Develop a Vegetation Protection Overlay: "Roadside Remnant Vegetation" in Council Planning Scheme to control machinery hygiene.	Council	2003
11	Encourage CMA to develop a register of stockpile sites in the region, together with their weed status, to reduce spread of weeds.	Council	2003
12	Investigate feasibility of a roadside marking system to highlight weed infestations	Council	2005

Refer also to guidelines Section 2.1 Remnant vegetation p15, Section 3 Revegetation and Rehabilitation p26, Section 7 Road Construction and Maintenance and Section 10 Fire Prevention p39.

14.2 Slashing

Guidelines:

- Preferably slash to retard growth of exotic grasses and enhance growth of indigenous plants and outside the fire restriction period. Review time of slashing annually according to the requirement of the season.
- Consider burning of exotic grasses as an alternative to slashing.

Priority	Action	Responsibility	Timeframe
1	Ensure that workers are encouraged to follow the Roadside Management Plan guidelines.	Landowners, Council, service providers, CFA	ongoing

Refer also to guidelines Section 3 Revegetation and Rehabilitation p26, Section 7 Road Construction and Maintenance p33 and Section 10 Fire Prevention p39.

14.3 Herbicides

Guidelines:

- The indiscriminate use of herbicides is not permitted.
- Use the appropriate herbicides for the job.
- Ensure that the application of herbicides is undertaken in accordance with the registration requirements as detailed on the label and in statutory requirements.
- Avoid indigenous understorey when spraying where practical.
- Spray weeds prior to seed set whenever possible.
- Cutting and poisoning, tree injection or spot spraying are the preferred methods of control. (The most appropriate method will depend on the species selected for control.)

Priority	Action	Responsibility	Timeframe
1	Ensure that operators using herbicides follow the Roadside Management Plan guidelines.	Landowners, Council, service providers, CFA	ongoing

Refer also to guidelines Section 7 road construction and maintenance p33, Section 10 fire prevention p39, Section 2.1 remnant vegetation p15 and Section 3 revegetation and rehabilitation p26.

14.4 Pest Animals

Rabbits, feral cats and foxes are the main established pest animals on roadsides. Landowners have a legislative requirement to control established pest animals on roadsides adjoining their property.

Guidelines:

- Undertake control of pest animals on High and Medium Conservation roadsides in a manner that causes the least disturbance to indigenous flora and fauna.

Priority	Action	Responsibility	Timeframe
1	Refer to the Catchment and Land Protection Act for the scheduled list of declared pest animals and responsibility for the control of them on roadsides.	Adjoining landowners	ongoing
2	Contact the Department of Sustainability and Environment for advice on most appropriate control methods.	Adjoining landowners	ongoing

Refer also to guidelines Section 3 Revegetation and Rehabilitation p26, Section 7 Road Construction and Maintenance p33 and Section 10 Fire Prevention p39.

15. FARMING AND ASSOCIATED ACTIVITIES

Objective: to minimise disturbance to indigenous roadside flora and fauna by agricultural activities.

Context: Regulations relating to the movement droving and grazing of stock are detailed in the Shire's Local Law No. 8 *Control of Livestock.* All grazing on local roads is subject to a Council Permit. The law identifies conditions that control the movement of stock and that droving of stock be subject to a permit and conditions specified by Council and DPI/DSE . VicRoads does not allow stock on freeways and has placed safety restrictions on stock on other declared roads.

15.1 Movement of Stock

Guidelines:

- Protect high and medium conservation value roadsides from undue stock damage.

Priority	Action	Responsibility	Timeframe
1	Ensure landholders are aware of the conservation values of roadsides and of the conditions relating to movement of stock as set out in this Plan and Local Law No. 8.	Council, VFF, Landcare groups	1999

Refer also to guidelines Section 2 Native Vegetation Management p15 and Section 14 Pest Plants and Animals p45.

15.2 Droving

Guidelines:

- Droving will not be permitted in high and medium conservation value roadsides unless it can be demonstrated that known conservation values will not be affected.

Refer also to guidelines Section 2 Native Vegetation Management p15.

15.3 Grazing

Guidelines:

- Grazing is not permitted on high conservation value roadsides unless it can be demonstrated that known conservation values will not be affected.
- Grazing is not permitted on medium conservation value roadsides (with indigenous or shrubby understorey) unless it can be demonstrated that known conservation values will not be affected ie:
  - Roadsides which have a significant cover (>25%) of medium conservation value native grasses and/or regenerating vegetation shall only be grazed subject to conditions relating to intensity and duration of grazing, moisture content of the soil and the flowering and seed set requirements of native grasses. Grazing is subject to a permit and conditions.

- Where grazing is permitted:
    - the stocking rate will preclude overgrazing (unless short-term pulse grazing of exotic grasses pre seed set) or baring of the ground and will aim to maintain adequate (5+cm) vegetation/grass cover
    - no grazing will occur when soils are saturated or prone to pugging and compaction
    - grazing will be for 4 week maximum period with at least 1 month between successive grazing periods and no more than 3 grazing periods per year
  - ensure that grazing does not spread noxious weed seed.
- Grazing on low conservation value roadsides, where no indigenous vegetation is likely to be removed or destroyed is encouraged as a management tool, subject to a permit from the Shire and subject to conditions relating to the seasonality, duration and intensity of grazing.
- Fencing of roadsides (including electric fences) for stock is not permitted, however fencing may be required to protect revegetating areas from stock damage and should be considered on a case by case basis. All fencing of roadsides is subject to a Council permit.
- Where practicable, an on site meeting between a representative of the Shire, the Department of Natural Resources and Environment and the applicant may occur to develop site specific management requirements for the area proposed for grazing.

Priority	Action	Responsibility	Timeframe
1	Contact adjoining landowners who are illegally occupying roads, eg with illegal fencing.	Council,	ongoing
2	Ensure landholders are aware of requirements for grazing on roadsides through publicity and education program.	Council	ongoing

Refer also to guidelines Section 2 Native Vegetation Management p15, Section 10 Fire Prevention p39, Section 14 Pest Plants and Animals p45.

15.4 Clearing on Roadsides for Agricultural/fencing Purposes

Context:

State Planning provisions require that a planning permit from Council (with referral to DPI/DSE) is required to remove, lop or destroy native vegetation on roadsides. Native vegetation includes grasses, understorey (shrubs) and trees. Exemptions that may apply for removal of native vegetation on private land along fencelines DO NOT apply to roadsides as they are public land.

Guidelines:

- After working in weed or disease affected areas clean vehicles and machinery of all soil and plant debris prior to working on high/medium conservation value sites or weed free sites.

Priority	Action	Responsibility	Timeframe
1	Consider application of an Environmental Significance or Vegetation Protection Overlay which requires that a permit be obtained to clear native vegetation on high and medium conservation value roadsides.	Council	2004
2	Ensure landholders understand the requirements for clearing on roadsides. Encourage landholders to ensure that all litter and rubbish (such as fencing wire, packets) is removed from the roadside at completion of works and is properly disposed.	Council	2003, ongoing

Refer also to guidelines Section 3.2 vegetation removal p28 and Section 9 firewood collection p37.

15.5 Ploughing

Guidelines:

- Ploughing cultivating or grading on roadsides shall only be on strategic firebreaks:
  - to maintain existing fuel breaks
  - as an ancillary measure on strategic firebreak roads prior to fuel reduction burning.
  - as part of installation and maintenance procedures by service utilities.

Refer also to guidelines Section 2 Native Vegetation Management p15.

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SECTION C APPENDICES

Appendix 1 Membership of the Roadside Management Plan Steering Committee

1999	Duncan Maughan,	Country Fire Authority
2003	David Parker	Country Fire Authority
1999	Joy Sloan	Department of Natural Resources and Environment
2003	Mark Sheehan	Department of Primary Industry/Sustainability and Environment
1999	Andrew Aitkin	Eastern Energy
1999	Eileen Collins	Friends of Chiltern National Park
1999/2003	Denis Gallagher	Indigo Shire
2003	Karen Jones	Indigo Shire
1999/2003	Jan Palmer	Indigo Shire Council, Landcare, *Steering Committee Chair*
1999/2003	Bill Hotson	Indigo Shire Council, VFF, CFA, Landcare
1999/2003	Don Chambers	Indigo Shire Council, VFF, Landcare
1999/2003	Jenny Dale	Mayor Indigo Shire Council
1999	Denis Steinhauser	Municipal Fire Prevention Committee
2003	Ed Baynes	Municipal Fire Prevention Committee
1999	Jan Salmon	Roadsides Conservation Advisory Committee
1999	Bob Bates	Telstra
1999/2003	Michael Kerr	VicRoads
1999/2003	Betty Murtagh	Victorian Farmers Federation
1999/2003	Sue Brunskill	Wooragee Landcare (Landcare groups)
2003	Susie Duncan	Friends of Chiltern National Park
2003	Christine Holmes	Chiltern
2003	Peter Graham	Indigo Shire Council

Appendix 2 Public consultation

The following people and groups attended workshops and/or provided written comment on the original Plan.

Owen Hogg	Alans Flat Fire Brigade
Scott Jessup	Beechworth
Stephen Gulliford	Beechworth
Peter Anfruns	Beechworth Environment Society
Doug Robinson	Birds Australia
Kirk Reitmann	Burgoigee Creek Landcare Group
Judy Griffiths	Burgoigee Creek Landcare Group
Bill Hotson	Chiltern Landcare Group
Jeanette Holloway	Chiltern Landcare Group
Joe Riordan	Chiltern Rural Fire Brigade
Duncan Maughan	Country Fire Authority
Joy Sloan	Department Natural Resources & Environment
Andrew Aitkin	Eastern Energy
Eileen Collins	Friends of the Chiltern National Park
Greg Miller	Huon
Jan Palmer	Indigo Shire Council
Jenny Dale	Indigo Shire Council
Ian Pye	Indigo Valley landcare Group
Neil Padbury	Keiwa Landcare Group
Ed Baynes	MFPC, Northern
Denys Steinhauser	MPFC, Southern
David Plant	Northern MFPC
Kevin Attridge	Northern MFPC
Jan Salmon	Roadsides Conservation Advisory Committee Victoria
Don Chambers	Rutherglen
Bob Bates	Telstra
Jim Blackney	Trust for Nature
D G Blore	VicRoads
Michael Kerr	VicRoads
Helen McGowan	Victorian Farmers Federation
David Sutherland	Victorian Farmers Federation
John Pearce	Victorian Farmers Federation
Betty Murtagh	Victorian Farmers Federation, Barnawartha
Paul McGowan	Victorian Farmers Federation, Barnawartha
Ian Lobbin	Victorian Farmers Federation, Barnawartha
John Stivens	Victorian Farmers Federation, Barnawartha
Brian Ford	Victorian Farmers Federation, Kiewa
Mark Buckingham	Victorian Farmers Federation, Rutherglen
Ken Pleming	Victorian Farmers Federation, Springhurst
Wayne Furze	Victorian Farmers Federation, Yackandandah
Sue Brunskill	Wooragee Landcare Group
Mark Burbidge	Yackandandah Rural Fire Brigade

The following people participated in the 2002/03 review of the Plan.

Bill	Hotson	Chiltern Landcare Group
Eileen	Collins	Friends of the Chiltern National Park
Jan	Palmer	then Indigo Shire Council
Peter	Graham	Indigo Shire Council
Sue	Brunskill	Wooragee
Christine	Holmes	Chiltern
Susie	Duncan	Friends of the Chiltern National Park
Denys	Steinhauser	MPFC, Southern
Ed	Baynes	MPFC, Southern
Kevin	Attridge	Northern MFPC
Betty	Murtagh	Victorian Farmers Federation, Barnawartha
Don	Chambers	then Indigo Shire Council
Fleur	Stelling	Consultant
Denis	Gallagher	Indigo Shire
Peter	O'Dwyer	Indigo Way
Kath	Oswald	Indigo Way
Karen	Jones	Indigo Shire
Mark	Greene	Indigo Shire
David	Parker	Country Fire Authority, North East Area
Mark	Shehan	Department Sustainability and Environment
Sue	Berwick	Department Sustainability and Environment
Michael	Kerr	VicRoads

Appendix 3 Roadside conservation value assessment sheet and maps

Appendix 4 Contacts for cultural, heritage and conservation issues

Contacts to consult for proposed roadworks (refer Chapter 7)

- Department of Natural Resources and Environment
  - Historic Places Branch
  - NE Region Wodonga Office
- Indigo Shire
  - Manager of Technical Services
  - Heritage Adviser
  - Environment Officer
- Heritage Victoria
  - Victorian Archaeological Survey
  - National Estate Register
- National Trust of Victoria
-

Other useful contacts

- Municipal Fire Prevention Officer Indigo Shire
- Manager Community Safety, CFA Wangaratta
- Indigo Shire Landcare Groups, contact details from DPI/DSE Wodonga Office
- Indigo Shire Victorian Farmers Federation Groups, contact details from VFF Regional Manager Wodonga.

Appendix 5 Weed control

Pest plants in the Indigo Shire

(courtesy M Sheahan DPI/DSE)

***State Prohibited* weeds** as declared under the Catchment and Land Protection Act 1994, which occur in the Department of Sustainability and Environment North East Region.

The Department is responsible for the control of these weeds wherever they occur in Victoria.

Common Name	Botanical Name
Black Knapweed	*Centaurea nigra* L.
Camel Thorn	*Alhagi maurorum* Medikis
Mesquite	*Prosopis* Spp.
Marijuana	*Canabis sativa* L.s. Lat.
Salvinia	*Salvinia molesta*
Water hyacynth	*Eichhornia crassipes*

***Regionally Prohibited* weeds** as declared under the Catchment and Land Protection Act 1994 which occur in the Department of Sustainability and Environment North East Region.

Land managers are responsible for the control of these weeds on land under their control.

DPI/DSE is responsible for control of Regionally Prohibited weeds on non-declared roadsides. Highways and declared main roads are the responsibility of Vic Roads or local municipalities.

Common Name	Botanical Name
African Daisy	*Senecio pterophorus*
RP African Lovegrass	*Eragrostis curvula*
Apple of Sodom	*S. Linnaeanum* Hepper & Jaeger
Boxthorn	*Lycium ferocissimum* Miers
Californian/Perennial Thistle	*Cirsium arvense* (L.) Scop
Cape Tulip (two-leaf)	*Homeria miniata* (Andr.) Sweet
Cape Tulip (one-leaf)	*Homeria flaccida* Sweet
Chilean Cestrum	*Cestrum parqui* L'Herit.
Devil's Claw (purple-flower)	*Proboscidea louisianica* (Miller) Thell.
Illyrian Thistle	*Onopordum illyricum* L.
RP Prairie Ground Cherry	*Physalis viscosa* L.
NE Serrated Tussock	*Nassella trichotoma* (Nees.) Hack. Ex Arech
NE Silver Leaf Nightshade	*Solanum elaeagnifolium* Cav.
Spiny Burr Grass/Gentle Annie	*Cenchrus longispinus* (Hack.) Fern.
Star Thistle	*Centaurea calcitrapa* L.

NE: new and emerging weed in the north east region
RP: Regional priority weed in the north east region

***Regionally Controlled* weeds** as declared under the Catchment And Land Protection Act 1994 which occur in the Department of Sustainability and Environment North East Region.

Responsibility for their control rests with the land manager. This generally includes the area of unoccupied road between the property boundary and the adjoining road formation on non-declared roadsides. Highways and declared main roads are the responsibility of Vic Roads or local municipalities.

Common Name	Botanical Name
Amsinckia	*Amsinckia* spp.
Bathurst Burr	*Xanthium spinosum*
Bindweed	*Convolvulus arvensis* L.
RP Blackberry	*Rubus fruticosus* L. Agg.
Caltrop	*Tribulus terrestris*
Cape Broom	*Genista monspessulana* (L.) Johnson
Devil's Claw (yellow-flower)	*Ibicella lutea* (indl.) V. Eseltine
Dodder	*Cuscuta* spp.
RP English Broom	*Cystisus scoparius* (L.) Link
Furze/Gorse	*Ulex europaeus* L.
Great Mullein	*Verbascum thapsus* L.
Hawthorn	*Craaegus monogvna* N.J. Jacq.
Hemlock	*Conium maculatum* L.
Horehound	*Marrubium vulgare* L.
RP Noogoora Burr/Californian Burr	*Xanthium strumarium* L.
Ox-eye Daisy	*Leucanthemum strumarium* L.
RP Paterson's Curse	*Echium plantagineum* L.
Prickly Pear (drooping)	*Opuntia culgaris* Mill.
Prickly Pear (erect)	*Opuntia stricta* (Haw.)
Saffron Thistle	*Carthamus lanatus* L.
Scotch/Heraldic Thistle	*Onopordum acanthium* L.
Skeleton Weed	*Chondrilla juncea* L.
Slender/Shore Thistle	*Carduus tenuiflorus* Curt./C. pyncnocephalus L.
Spear Thistle	*Circium vulgare* (Savi) Ten.
Spiny Rush	*Juncus acutus* L.
St. Barnarby's Thistle	*Centaurea solstitialis* L.
RP St. John's Wort	*Hypericum perforatum*
Stinkwort	*Ditttrichia graveolens* (L.) Greuter
Sweet Briar	*Rosa rubiginosa* L.
Thorn Apple (common)	*Datura stramonium* L.
Thorn Apple (long spine)	*Datura ferox* L.
Thorn Apple (recurved)	*Datura innoxia* Mill.
Topped Lavender	*Lavandula stoechas* L.
Tree of Heaven	*Ailanthus altissima* (Mill.) Swingle.
Tutsan	*Hypericum androsaemum* L.
Variegated Thistle	*Silybum marianum* (L.) J. Gaertn.
Viper's Bugloss	*Echium vulgare* L.
Wheel Cactus	Opuntia *r*ovusta Wendl. Ex. Pfleffer
Wild Garlic	*Allium vineale* L.
Wild Mignonette	*Reseda luteola* L.
Wild Teasel	*Dipsacus fullonum* L. Ssp. Fullonum
Wild Watsonia	*Watsonia meriana* (L.) Miller 'Bulbillifera'

NE: new and emerging weed in the north east region
RP: Regional priority weed in the north east region

Restricted Weeds species will not be permitted to be traded in anyway however it will not be a requirement to destroy existing populations. No species have yet been declared for this category under the Catchment And Land Protection Act 1994. A list is currently being developed & negotiations have commenced

***Note: These lists are for the Department Of Sustainability and Environment North East Region only. The full list for the State of Victoria is available from other documents.**

Weeds of National Significance

(Source: Environment Australia)

	Common Name	Scientific Name
	Alligator weed	*Alternanthera philoxeroides*
	Athel Pine	*Tamarix aphylla*
	Bitou bush/boneseed	*Chrysanthemoides monilifera*
RP	Blackberry	*Rubus fruticosus* agg.
	Bridal creeper	*Asparagus asparagoides*
	Cabomba	*Cabomba caroliniana*
NE	Chilean needle grass	*Nassella neesiana*
	Gorse	*Ulex europaeus*
	Hymenachne	*Hymenachne amplexicaulis*
	Lantana	*Lantana camara*
	Mesquite	*Prosopis* spp.
	Mimosa	*Mimosa pigra*
	Parkinsonia	*Parkinsonia aculeata*
	Parthenium weed	*Parthenium hysterophorus*
	Pond apple	*Annona glabra*
	Prickly acacia	*Acacia nilotica* ssp. *indica*
	Rubber vine	*Cryptostegia grandiflora*
	Salvinia	*Salvinia molesta*
NE	Serrated tussock	*Nassella trichotoma*
	Willow except weeping willow, pussy willow, and sterile pussy willow.	*Salix* spp. except *S. babylonica, S. X calodendron* and *S. X reichardtiji*

NE: new and emerging weed in the north east region
RP: Regional priority weed in the north east region

Environmental Weeds & other introduced plants in the Shire of Indigo

(courtesy S Berwick, G Johnson DPI/DSE)

An Environmental Weed is a plant that colonises natural vegetation and threatens conservation values. It can be an exotic or native plant that is not indigenous to the area. They are so called, because their presence is in some way detrimental to the natural environment. **Refer also to Bush Invaders Book – Albury- Wodonga Environs**

COMMON NAME	LATIN NAME	LIFEFORM	
Apple	*Malus X domestica*	T	
Black Locust Acacia or False Acacia	*Robinia pseudoacacia*	T	
Cherry Plum	*Prunus cerasifera & P.* spp*		
Olive	*Olea europaea ssp. europaea*	T	
Peppercorn Tree	*Schinus molle*	T	
Pittosporum	*Pittosporum undulatum*	T	
Palm – Canary Island Date	*Phoenix canariensis*	T	
Pine – Radiata or Monterey	*Pinus radiata*	T	
Poplar – Lombardy & White	*Populus nigra cv "Italiica" & P. alba*	T	
Wattle - Cootamundra	*Acacia baileyana*	T	
Wattle – Sallow or Golden Wreath	*Acacia saligna*	T	
Weeping Willow	*Salix babylonica s.l.*	T	
White Willow	*Salix alba*	T	
Briar Rose, Sweet Briar	*Rubus fruiticosus*	S	
Broom – Scotch or English	*Cystisus scoparus*	S	**RP**
Broom – Cape of Montpellier, Genista	*Genista monspessulana*	S	
Cotoneaster	*Cotoneaster pannosus*	S	
Firethorn	*Pyracantha angustifolia*	S	
Tagasaste, Tree Lucerne	*Chamaecytisus palmensis*	S	
Iinkweed	*Phytolaca octandra*	H	
Blackberry	*Rubus ulmifolius*	Scrambler	**RP**
Blue Periwinkle	*Vinca major*	Scrambler	
Drain Flat-sedge	*Cyperus eragrostis*	H - sedge	
Jointed Rush	*Juncus articulatus*	H - rush	
Asparagus	*Asparagus officinalis*	H	
Fleabane	*Conyza albida*	H	
Freesia	*Freesia alba x Freesia leichtlinii*	H	
Large-flower Wood-sorrel	*Oxalis purpurea*	H	
Lavender – Italian or Topped	*Lavandula stoechas*	H	
Onion Grass	*Romulea rosea*	H	
Purple-top Verbena	*Verbena bonariensis s.l.*	H	
Twiggy Mullein	*Verbascum virgatum*	H	
Wild Gladiolus	*Gladiolus undulatus*	H	
Wild Sage	*Salvia verbenaca*	H	
Yellow Ixia	*Ixia maculata*	H	
Bearded Oat	*Avena barbata*	G	
Brown-top Bent	*Agrostis capillaris*	G	
Great Brome	*Bromus diandrus*	G	
Kikuyu	*Pennisetum clandestinum*	G	
Phalaris	*Phalaris minor*	G	
Panic Veldt Grass	*Ehrharta erecta*	G	
Paspalum	*Paspalum dilatatum*	G	
Perennial Veldt Grass	*Ehrharta calycina*	G	
Sweet Vernal-grass	*Anthoxanthum odoratum*	G	
Water Couch	*Paspalum distichum*	G	

Wild Oat	*Avena fatua*	G	
Yorkshire Fog	*Holcus lanatus*	G	
Common Vetch	*Vicia sativa*	Climber	
Chilean Needle-grass	*Nassella neesiana*	G	**NE**
Phalaris	*Phalaris aquatica*	G	
Bridal Creeper	*Asparagus asparagoides*	Climber	
Tambookie Grass	*Hyparrhenia hirta*	G	
Whisky Grass	*Andropogon virginicus*	G	

LIFELOOK KEY	G = grass
T = tree	sS = small shrub
S = shrub	H = herbaceous plant

NE: new and emerging weed in the north east region
RP: Regional priority weed in the north east region

Appendix 6 Native Vegetation Retention Controls

From *Planning and Environment Act 1987*

The Native Vegetation Retention Controls state that a permit is required from the local municipality to remove, prune, lop or destroy any native vegetation including vegetation located on roadsides (except where a specific exemption applies. -see below). Native vegetation includes grasses, understorey (shrubs) and trees.

Applications for permission to remove vegetation are made to the responsible authority, (in most instances, the local council). All applications for removal of vegetation on roadsides must be referred to DPI/DSE. For municipal works on roads, the Council is the applicant and DPI/DSE the referral authority who determines the permit.

Exemptions that may apply for removal of native vegetation on private land along fencelines DO NOT apply to roadsides as they are public land.

Appendix 7 Ecological Vegetation Classes and Conservation Status in Indigo Shire

CONSERVATION STATUS IN BIOREGION			EVC_DESCRIPTION (includes mapping units of complexes & mosaics)	EVC NUMBER
Highlands - Northern Fall	Northern Inland Slopes	Victorian Riverina		
LC			Riparian Forest	18
	V		Riparian Shrubland	19
LC	LC	LC	Heathy Dry Forest	20
LC	LC		Shrubby Dry Forest	21
LC	D		Grassy Dry Forest	22
LC	D		Herb-rich Foothill Forest	23
LC	LC		Damp Forest	29
LC			Montane Dry Woodland	36
LC			Montane Damp Forest	38
E	E		Valley Grassy Forest	47
E	E	E	Plains Grassy Woodland	55
	E		Floodplain Riparian Woodland	56
	V	V	Box Ironbark Forest	61
	E	E	Alluvial Terraces Herb-rich Woodland	67
E	E	E	Creekline Grassy Woodland	68
	LC		Granitic Hills Woodland	72
	D		Rocky Outcrop Shrubland/Herbland Mosaic	73
	E	E	Wetland Formation	74
E	E		Spring Soak Woodland	80
	E	E	Alluvial Terraces Herb-rich Woodland/Creekline Grassy Woodland Mosaic	81
V	E		Swampy Riparian Woodland	83
D			Riparian Forest/Swampy Riparian Woodland/Riparian Shrubland/Riverine Escarpment Scrub/Disturbed Mosaic	84
	E	E	Alluvial Terraces Herb-rich Woodland/Plains Grassy Woodland Complex	152
	E		Alluvial Terraces Herb-rich Woodland/Valley Grassy Forest Complex	153
D	E	E	Grassy Woodland	175
	E	E	Plains Grassy Woodland/Rainshadow Grassy Woodland Complex	187
	E		Plains Grassy Woodland/Valley Grassy Forest Complex	188
	E		Plains Grassy Woodland/Valley Grassy Forest/Rainshadow Grassy Woodland Complex	190

	E		Valley Grassy Forest/Box Ironbark Forest Complex	213
	E	E	Gilgai Plain Woodland/Wetland Mosaic	235
	LC		Granitic Hills Woodland/Rocky Outcrop Shrubland/Herbland Mosaic	244
E	E		Rainshadow Grassy Woodland /Valley Grassy Forest Mosaic	251
	E	D	Riverine Grassy Woodland/Riverine Sedgy Forest/Wetland Mosaic	255
		E	Sand Ridge Woodland	264
		E	Pine Box Woodland	868

EVC bioregional conservation status brief definition *

X .	presumed extinct	probably no longer present in the bioregion (or, if present, below the resolution of available mapping)
E .	endangered	< 10 of pre-European extent remains (or a combination of depletion, loss of quality, current threats and rarity that gives a comparable status)
V .	vulnerable	10 - 30% of pre-European extent remains (or a combination of depletion, loss of quality, current threats and rarity that gives a comparable status)
D .	depleted	> 30% and up to 50% of pre-European extent remains (or a combination of depletion, loss of quality, current threats and rarity that gives a comparable status)
R .	rare	rare (as defined by geographic occurrence) but neither depleted, degraded nor currently threatened to an extent that would qualify as endangered, vulnerable or depleted
LC .	least concern	> 50% or pre-European extent exists and subject to little to no degradation over a majority of this area
na .	not applicable	the map unit is not a distinct native vegetation type and therefore conservation status is not applicable

* full definition in Victoria's Native Vegetation Management - Framework for Action

Table sourced from Sue Berwick, Department Sustainability and Environment, Benalla.