THE
SOUTHERN FLEURIEU PENINSULA
ROADSIDE VEGETATION
MANAGEMENT PLAN
2011

City of Victor Harbor
and
District Council of Yankalilla
Acknowledgements

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Mayor’s Message

Foreword

The District Council of Yankalilla and the City of Victor Harbor are two of the fastest growing Local Government areas in South Australia.

To manage further expected growth and prioritise activities each Council has developed a Strategic Plan which responds to community aspirations and sets goals and strategies.

Both Councils are committed to protecting and enhancing natural resources and making the Southern Fleurieu Peninsula a sustainable region where current and future generations will be able to live in a vibrant community with a healthy environment. We therefore encourage and embrace the principles of ecologically sustainable development and implement best practice with regard to integrated natural resource management.

The development of this Roadside Vegetation Management Plan (RVMP) reflects Council’s commitment to protect their biological assets and to manage Council’s land to provide a net environmental and community benefit. The plan demonstrates Council’s obligations to develop strategies to promote better understanding and management across the municipalities and the broader region.

The RVMP is a guide to enable Council employees, contractors, service providers and landholders to comply with the Native Vegetation Act and other legal responsibilities. It also provides information on procedures that should be followed in order to protect and enhance our unique and beautiful vegetation and landscape.

Due to the biological and physical similarities of the adjacent districts, the Southern Fleurieu Peninsula RVMP was a collaborative project by the City of Victor Harbor and the District Council of Yankalilla.

It is intended that this plan will provide a framework for road reserve management and promote good environmental practices in Council operations and community land management across both Council districts.

_________________________ _________________________
Graham Philp Paul Newman
Mayor Mayor
City of Victor Harbor District Council of Yankalilla
Section 1 Introduction

1.1 Introduction

The Southern Fleurieu Peninsula Roadside Vegetation Management Plan (RVMP) was developed for the District Council of Yankalilla and City of Victor Harbor. These adjoining districts share many similarities including:

- Topography;
- Rainfall;
- Landuse;
- Native Vegetation Types;
- Soil Types;
- Climate; and
- Natural Resource Issues.

The partnership of the two districts to develop the Roadside Vegetation Management Plan has resulted from the need to efficiently produce a document that assists in the protection of valuable biodiversity assets, whilst maintaining a safe road network across the Southern Fleurieu Peninsula. The RVMP is a guide to enable Council employees, contractors, service providers and landholders to comply with the Native Vegetation Act and other legal responsibilities.
1.2 The Southern Fleurieu Peninsula

The District Council of Yankalilla covers a geographical area of 77,650 hectares and includes a unique and attractive undulating rural landscape, a visually dominating coastline with cliffs, sand dunes and beaches, a number of creek systems, conservation parks and forests including Deep Creek Conservation Park.

The municipality consists of small rural towns such as Delamere and Inman Valley, the larger rural town of Myponga, and less developed coastal towns such as Cape Jervis, Rapid Bay, Second Valley and Myponga Beach.

There is a concentration of development around Normanville, Carrickalinga and Yankalilla, including holiday homes and businesses.

The population of the district is approximately 4,900 which increases significantly during holiday times.

There are 1028 km of road reserve located within the District Council of Yankalilla. To provide vehicular access to properties within the district, 602 km of roads have been constructed or formed. Of the 602 km of developed road network, 89 km is under care and control of the Department of Transport, Energy and Infrastructure. The remaining constructed road length is under the care and control of the District Council of Yankalilla and consists of 128 km of sealed roads and 385 km of unsealed roads.

The City of Victor Harbor covers a geographical area of 34,463 hectares on the Southern Fleurieu Peninsula of South Australia. Victor Harbor is the largest town in the region with a permanent population of 12,000 people, which in peak holiday times swells to 30,000.

The city is the main service and shopping hub for the Southern Fleurieu Peninsula. It also provides a focus for residents and a destination for visitors, with a range of unique events and activities held annually.

The district has a diverse topography with flat and undulating developed areas, town beaches, coastal cliffs, islands, hills, farmland and river systems. Victor Harbor also has various local and visitor attractions such as Granite Island, the Bluff, the Causeway and Hindmarsh Falls.

To serve the city and surrounding district a road network of approximately 265 kilometres has developed. The network includes 105km of sealed formed roads, 150km of unsealed formed roads, 10km of unformed roads and many unmade road reserves.
1.3 Significance of Remnant Vegetation in the Southern Fleurieu Peninsula

The Southern Fleurieu Peninsula has been extensively cleared of its original vegetation for agricultural purposes. This has left roadsides as some of the only remaining areas of remnant vegetation. These remnants are highly valued as a biological resource with many also serving as important wildlife corridors and habitat.

Although the Southern Fleurieu Peninsula retains less than 10% of its original vegetation cover, several large patches of remnant vegetation remain.

In the Victor Harbor Council district these include Springmount, Mount Billy and Newland Head Conservation Parks, Council reserves and land under Heritage agreements. The most noteworthy blocks of native vegetation under Council management are Hindmarsh Falls Reserve and Springmount Forestry Reserve.

The Yankalilla district includes the largest continuous tract of native vegetation in the Mount Lofty Ranges and Greater Adelaide region, at Deep Creek Conservation Park. The vegetation associations represent part of what existed across the Mount Lofty Ranges prior to European settlement.

Other significant reserves are the Talisker Conservation Park, Eric Bonython, Nixon Skinner, Yulte and Myponga Conservation Parks and the Normanville dune system.

The Southern Fleurieu Peninsula has greatly varying soils, altitudes, rainfall and climatic zones. These variables give rise to many vegetation types, ranging from tall Stringybark Woodland at higher altitudes, to Coastal Dune associations and River Estuaries.

Condition of roadside vegetation in the district varies from intact remnants of high conservation value to large tracts that contain no native species.

To date the main comprehensive survey of roadside native vegetation in the district was conducted by Hyde (2002). The extent and quality of roadside vegetation mapped by Hyde (2002) is illustrated in Appendix 1. The condition of roadside vegetation is summarised in Table 1.1, and Table 1.2 shows roadside length (m) of the dominant vegetation associations within each council area. We recommend a review of the Hyde Report (1997) prior to any further survey work being undertaken on the Southern Fleurieu.

Both the City of Victor Harbor and District Council of Yankalilla have initiated a Roadside Marker Scheme to identify and preserve areas of significant remnant vegetation along roadsides (see Section 7.2, page 161). All plant species (endemic and weeds) within these areas have been surveyed and recorded. This data is being collated by the councils and has the potential to be included on the State’s roadside vegetation database.
Table 1.1. Length (km) of roadside native vegetation by condition as determined by Hyde (2002).

<table>
<thead>
<tr>
<th>Condition</th>
<th>Victor Harbor</th>
<th>Yankalilla</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near natural diversity &amp; density</td>
<td>27</td>
<td>44</td>
</tr>
<tr>
<td>High diversity &amp; moderate density</td>
<td>19</td>
<td>37</td>
</tr>
<tr>
<td>Native overstorey</td>
<td>245</td>
<td>319</td>
</tr>
<tr>
<td>Total of top 3 categories</td>
<td>291</td>
<td>400</td>
</tr>
<tr>
<td>Total surveyed</td>
<td>461</td>
<td>923</td>
</tr>
</tbody>
</table>
Table 1.2. Roadside length (m) of the dominant species or community represented for the highest rating 3 categories by council area, Hyde 2002.

<table>
<thead>
<tr>
<th>Species</th>
<th>Near natural diversity &amp; density</th>
<th>High diversity &amp; moderate density</th>
<th>Native overstorey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Victor Harbor</td>
<td>Yankalilla</td>
<td>Victor Harbor</td>
</tr>
<tr>
<td>Bracken fern (<em>Pteridium esculentum</em>)</td>
<td>1770</td>
<td>3790</td>
<td>3031</td>
</tr>
<tr>
<td>Brown stringybark (<em>Eucalyptus baxteri</em>)</td>
<td>12848</td>
<td>36887</td>
<td>4413</td>
</tr>
<tr>
<td>SA blue gum (<em>Eucalyptus leucoxylon</em>)</td>
<td>603</td>
<td>2091</td>
<td>7436</td>
</tr>
<tr>
<td>Little sedge (<em>Gahnia lanigera</em>)</td>
<td>-</td>
<td>695</td>
<td>-</td>
</tr>
<tr>
<td>Kangaroo grass (<em>Thesmeda triandra</em>)</td>
<td>-</td>
<td>235</td>
<td>-</td>
</tr>
<tr>
<td>Pink gum (<em>Eucalyptus fasciculosa</em>)</td>
<td>3014</td>
<td>-</td>
<td>1501</td>
</tr>
<tr>
<td>Ridge-fruited mallee (<em>Eucalyptus incrassata</em>)</td>
<td>2828</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cup gum (<em>Eucalyptus cosmophylla</em>)</td>
<td>970</td>
<td>-</td>
<td>1138</td>
</tr>
<tr>
<td>Manna gum (<em>Eucalyptus viminalis</em>)</td>
<td>2311</td>
<td>-</td>
<td>1970</td>
</tr>
<tr>
<td>Swamp gum (<em>Eucalyptus ovata</em>)</td>
<td>564</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Coastal daisybush (<em>Olearia axillaris</em>)</td>
<td>1735</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Drooping sheoak (<em>Allocasuarina verticillata</em>)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Red gum (<em>Eucalyptus camadulensis</em>)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Native grasses</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kangaroo thorn (<em>Acacia paradoxa</em>)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dryland tea-tree (<em>Melaleuca lanceolata</em>)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Rushes (<em>Juncus and Cyperus spp.</em>)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Samphire</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Planted native species</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Figure 1.1. Southern Fleurieu District Council Boundaries and Road Networks
1.4 Key Objectives of the Southern Fleurieu RVMP

Council’s roadside vegetation management objectives include:

- To meet legal and community requirements for the provision and maintenance of a safe road network and the protection of roadside vegetation;
- To maintain and enhance the species diversity, genetic diversity, vegetation associations and habitat types of roadside vegetation;
- To maintain and enhance the habitat and corridor value for indigenous flora and fauna;
- To minimise the adverse impacts of activities occurring within the corridor;
- To establish and maintain an assessment process of minor clearance proposals to ensure compliance with the Plan and the Native Vegetation Act;
- To clearly identify unauthorized activity in road reserves;
- To improve the awareness of roadside vegetation management issues for Council staff and contractors, the community and other authorities.
1.5 RVMP Policies

1. The general or overarching roadside vegetation policy of the District Council of Yankalilla and the City of Victor Harbor is to protect and conserve remnant roadside vegetation, whilst also providing a safe and functional road network.

2. Council will require specifications for all road construction works to be in accordance with the RVMP and accompanying guidelines, and have regard to best practice principles for environmental management.

3. The District Council of Yankalilla and the City of Victor Harbor will require specifications for all road maintenance and minor construction works to be in accordance with the RVMP and accompanying guidelines, and have regard to best practice principles for environmental management.

4. The removal of roadside vegetation will be in accordance with the provisions of the Southern Fleurieu Peninsula Roadside Vegetation Management Plan and accompanying guidelines.

5. Council will require specifications for all road drainage design, construction and maintenance works to be in accordance with the RVMP and accompanying guidelines, and have regard to best practice principles for environmental management.

6. Council will require specifications for all clearance for road sight distance and maintenance clearance envelopes to be in accordance with the RVMP and accompanying guidelines, and have regard to best practice principles for environmental management.

7. Council will require specifications for all clearance for the installation of services to be in accordance with the RVMP and accompanying guidelines, and have regard to best practice principles for environmental management. The constructing authority and their agents will comply with the provisions of the RVMP.

8. The removal or control of pest plants and animals will be in accordance with the RVMP and accompanying guidelines.

9. Council will meet its obligations under the Natural Resources Management Act 2004, and will allocate funds to control environmental weeds on Category 1 and 2 roadsides, in consultation with the Fleurieu NRM Board.

10. When Council is satisfied that a patch of roadside vegetation is being seriously affected by an imbalance of mistletoe and likely to jeopardise the long term health of the remnant vegetation, and where no other alternative exists, Council will consider trial areas or pilot programs for the removal of mistletoe or the pruning of affected limbs, in consultation with the Native Vegetation Council.

11. Council will comply with the fenceline clearance standards of the Native Vegetation Act 1991 and the guidelines for the management of roadside vegetation (July 1997) as issued by the Native Vegetation Council.
12. Council will comply with the property access standards of the *Native Vegetation Act 1991* and the guidelines for the management of roadside vegetation (July 1997) as issued by the Native Vegetation Council.

13. Council when developing and reviewing Regional and Local Bushfire Prevention plans will adopt the provisions of the RVMP and accompanying guidelines.

14. Council policy on roadside vegetation management for bushfire suppression is to reduce biomass of non-native vegetation in areas identified in the District Bushfire Prevention Plan.

15. Council permission is required to graze any roadside. Grazing Category 1, Category 2 & Category 3 roadsides throughout the district is prohibited. Consultation with Native Vegetation Council Secretariat DWLBC must be undertaken prior to any final approval for grazing of category 4 or category 5 roadsides to ensure compliance with the requirements of the *Native Vegetation Act, 1991*. (see Section 1.12 for an explanation of the category system).

16. Where movement of stock occurs on roadsides containing native vegetation, give consideration to all strategies that will minimise the impact upon existing or regenerating indigenous vegetation. Where the movement of stock is permitted, advise landowners that stock must be kept moving and not held within the road reserve.

17. Horse trails will not be established along Category 1 or 2 roadsides and only on Category 3 road verges in exceptional circumstances as approved by Council and with NVC approval.

18. Horse trails will not be established on unmade road reserves or road verges that form part of a Strategic Wildlife Corridor or revegetation site, unless in exceptional circumstances as approved by Council, and with NVC approval.

19. Roads identified for protection of remnant vegetation, wildlife habitat, and strategic environmental corridors or for their recreational or tourism opportunities will not be subject to disposal. (Council has identified and categorised unused road reserves to establish their current and future status in ‘Survey 40 and 41 Undeveloped Road Reserve Vegetation Survey, Peter D. Clark, March 2002’).

20. The establishment of trails along roadsides for use by trail bikes or off-road vehicles is prohibited. Council will not endorse the use of unregistered vehicles on roadsides.

21. Council undertake to identify and categorise unused road reserves to establish their current and future status. Those roads identified for protection of remnant vegetation, wildlife habitat, and strategic environmental corridors or for their recreational or tourism opportunities will not be subject to disposal and should not be leased.

22. Council will not permit ploughing or grading of roadsides other than in exceptional circumstances as approved by the responsible authority.

23. Application to Council is required for the collection of seed, plant propagating material and any plant parts from all Council reserves and roadsides. If approval is granted the 12 month issued permit must be carried. Permission is contingent on complying with the requirements of an “Environmental Code of Practice”. Unauthorised collection is prohibited.
24. Activities involving the removal of native plant material (excepting seed and some small branch and leaf collection by permit) will be not be permitted by council. Collection of firewood is prohibited.

25. The Southern Fleurieu Councils will protect and maintain remnant vegetation by budgeting for protection and maintenance work, encouraging Bush for Life volunteers and seeking external funds.

26. Roadside locations that contain plants or vegetation types of high conservation significance (eg rare or endangered) must be identified, recorded and protected.

27. Regenerating indigenous vegetation will be protected and encouraged on all roadsides in the Council district except where:
   - Roadsides are designated as strategic or tactical firebreaks as specified in the District Bushfire Prevention Plan (see Section Bushfire Prevention);
   - Vegetation may interfere with EDPTI overhead powerlines;
   - EDPTI assets and strategic firebreaks are established;
   - Service authorities locate their assets on the roadside (see Section Installation of Services);
   - Regenerating vegetation growing within the effective part of the table drain interferes with the working of the drain (see Section Road Construction & Road Maintenance);
   - Regenerating vegetation interferes with maintaining sight distances (see Section Verge clearance for sight distance);
   - Regenerating vegetation is on the road shoulder and interferes with the structure of the road (see Section Road Construction & Road Maintenance);
   - Regenerating vegetation interferes with structures and signs located on the road reserve;
   - Road construction and road widening is necessary (see Section Road Construction & Road Maintenance);
   - Exotic plants of historical or cultural significance exist on the roadside;
   - Formal crossings exist.

28. Council will adopt where appropriate, revegetation strategies to achieve improved land management on roadsides under its care and control.

29. The District Council of Yankalilla, the City of Victor Harbor and the Native Vegetation Council will review the RVMP after three years and then at five-yearly intervals.
Section 2 Background Information

2.1 Legal Responsibilities

Councils, as the legal custodians of roadsides, must be aware of a number of legislative Acts, by-laws, policies, standards and guidelines which may impact upon roadsides and their component parts. Roadside Vegetation Management Plans should consider all of the relevant responsibilities of Councils under many areas of legislation with an integrated approach.

2.1.1 Relevant Legislation

**Biological**

**Vegetation:**
- Native Vegetation Act 1991
- National Parks & Wildlife Act 1972
- Natural Resources Management Act 2004
- Environment Protection and Biodiversity Conservation Act 1999
- Local Government Act 1999
- Pastoral Land Management & Conservation Act 1989
- Telecommunications Act 1991
- Electricity Corporations Act 1995

**Weed, Pest & Disease Control:**
- Agricultural Chemicals Act 1955-87
- Natural Resources Management Act 2004
- Dog & Cat Management Act 1995
- Fruit & Plant Protection Act 1992
- Impounding Act 1920
- Noxious Insects Act 1934
- Seeds Act 1979
- Stock Act 1990

**Fauna:**
- Environment Protection and Biodiversity Conservation Act 1999
- National Parks & Wildlife Act 1972-78
- Wilderness Protection Act 1992

**Special Environmental Areas:**
- Electricity Corporations Act 1995
- Catchment Water Management Act 1995
- Public Parks Act 1943
- Water Resources Act 1997
Physical

Water Quality:
Environment Protection Act, 1993
Catchment Water Management Act 1993
Water Conservation Act 1936-75
Environment Protection and Biodiversity Conservation Act 1999

Soil Management:
Soil Conservation & Land Care Act 1987
Pastoral Land Management & Conservation Act 1989

Hazardous Materials Management:
Agricultural Chemicals Act 1 955-1987
Dangerous Substances Act 1979
Petroleum Products Regulations Act 1995

Waste Management:
Environment Protection Act 1993

Fire Management:
Fire and Emergency Services Act 2005

Undergrounding of Services:
Electricity Corporations Act 1995
Telecommunications Act 1991

Social

Heritage:
Aboriginal Heritage Act 1988
Australian Heritage Commission Act 1975
Heritage Act 1993

Safety & Environment Management:
Dangerous Substances Act 1979
Fences Act 1973-75
O.H.S. & W. Act 1986

Traffic Management:
Highways Act 1926
Roads Opening & Closing Act 1991
Road Traffic Act 1961
Ownership & Equity:
Encroachments Act 1944-69
Water Resources Act 1990

2.1.2 Legislation and Roles of Responsible Bodies

a) Native Vegetation Council

A Roadside Vegetation Committee was established in SA in 1965 and became a sub-committee of the then Native Vegetation Authority in 1985. The introduction of the Native Vegetation Act in 1991 saw the native Vegetation Council (NVC) deal with roadside vegetation issues.

The framework within which the NVC operates in relation to roadside vegetation is provided by the Objectives and Clearance Exemption Provisions of the Native Vegetation Act 1991.

Objectives of the Act include:
- Incentives and assistance for conservation and management;
- Limitation of clearance;
- Encouragement of research;
- Encouragement for re-establishment of native vegetation.

Regulation 5(1)(y) of the Regulations under the Native Vegetation Act 1991 (as in force 1 July 2006)

Pursuant to Section 27(1)(b) of the Act, native vegetation may, subject to any other Act or law to the contrary, be cleared –
by, or on behalf of, a local council if –
  i. The vegetation is growing on a road reserve in the area of the council; and
  ii. The person undertaking the clearance complies with a management plan relating to the clearance prepared by the local council and approved by the Council or, if no such plan has been prepared and approved, with any guidelines prepared by the Council in accordance with section 25 of the Act relating to the clearance.

Councils are encouraged by the NVC to prepare Roadside Vegetation Management Plans (RVMPs) which are subject to endorsement by the Native Vegetation Council. Thus the NVC has the capacity to influence the form, scope and content of Council RVMPs. The main roles of the NVC in relation to roadside vegetation is to:
- Advise the Minister in relation to the preservation, enhancement and management of native vegetation, and in relation to the re-establishment of native vegetation on land from which native vegetation has been cleared.
- Encourage and assist local Councils to prepare RVMPs.
- Deal with applications by local Councils regarding the clearance of roadside vegetation.
- Contribute to specific programs and projects for the conservation of roadside vegetation.
- Assist in coordination of roadside programs at State level (e.g., Roadside Marker Program).
- Liaise with fire authorities, NRM boards re relevant roadside management programs.
- Assist roadside vegetation research.

The NVC published guidelines for the management of roadside vegetation in 1997.

b) Australian Government Department of the Environment, Water, Heritage and the Arts

This Department administers the **Environment Protection and Biodiversity Conservation Act 1999**, (the EPBC Act).

Objectives of the Act include:
- Protection of the environment, especially of matters of national environmental significance.
- To promote ecologically sustainable development through conservation and ecologically sustainable use of natural resources.
- To promote the conservation of biodiversity.
- To promote a cooperative approach to the protection and management of the environment.
- To assist in the cooperative implementation of Australia’s international environmental responsibilities.
- To recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia’s biodiversity and to promote the use of indigenous people’s knowledge of biodiversity with the involvement of, and in cooperation with, the owners of the knowledge.

**Native Vegetation and the EPBC Act**


The Act specifies that Commonwealth approval is required for actions that are likely to have a significant impact on native vegetation that contains species or communities that are of national significance. Commonwealth approval is also required for actions that are likely to have an impact on native vegetation in areas that are of national environmental significance, namely World Heritage areas, Ramsar wetlands or the Commonwealth Marine area.

The six parameters of national environmental significance identified in the Act as triggers for the Commonwealth assessment and approval regime are:
- World Heritage properties
- Ramsar wetlands of international importance
- nationally threatened species or communities
- migratory species protected under international agreements
- nuclear actions, including uranium mining, and
- the Commonwealth marine environment.

The Commonwealth Environment Minister has issued administrative guidelines on whether an impact is likely to be significant. These guidelines are available from Environment Australia.

**Example**
The administrative guidelines on the significance of an impact indicates when certain activities are likely to have a detrimental effect on areas of national environmental importance. For example:

“Widening an existing road is not likely to be significant under the Act where the road verge has previously been cleared or the vegetation beside the road has been heavily modified. However, if road widening requires removal of native vegetation that contains critically endangered plant species or communities, it is likely to have a significant impact and should be referred to the Commonwealth Environment Minister.”

**The assessment and approval process:**
A person proposing to take action which is likely to have a significant impact on an area of national environmental importance should refer the matter to the Environment Minister. The Minister will decide whether the action requires approval under the EPBC Act.

For the purpose of assessing actions, the EPCB Act enables the Commonwealth to accredit State or Territory environmental impact assessment processes that meet appropriate criteria. If no accredited State or Territory assessment is made then a Commonwealth assessment must be undertaken.

Following assessment, the Minister will determine if approval is granted and the conditions to impose to ensure the protection of areas of national environmental importance.

**Penalties:**
Actions that are taken in contravention of the EPBC Act may attract a civil penalty of up to $5.5 million, or a criminal penalty of up to $46,000 or in extreme cases up to 7 years imprisonment.

**Management of native vegetation:**
The EPBC Act also contains other provisions to encourage improved management of native vegetation. These include provisions for development of, and Commonwealth assistance for:

- Conservation agreements
- Wildlife conservation plans
- Bioregional plans
Projects to identify and monitor biodiversity
A register of habitat that is critical to the survival of listed threatened species and communities will be established under the EPBC Act. Critical habitat in Commonwealth areas must not be damaged. Further information about these provisions is available from Environment Australia.

c) Council

**POLICY:1 (the general policy relating to roadside vegetation)**

The roadside vegetation policy of the District Council of Yankalilla and the City of Victor Harbor is to protect and conserve remnant roadside vegetation, whilst also providing a safe and functional road network.

The City of Victor Harbor Community Plan 2011-2021 provides the following environmental Objective:

**Objective 3.** Balance the pressures of high level growth with safeguarding the environment & lifestyle:

The City of Victor Harbor Strategic Directions 2011 to 2015 indicates as environmental strategies;

3.1. Protect ecological values and biodiversity;

3.1.4 Ensure a planned approach to the management of the biodiversity and roadside vegetation

3.1.8 Develop clear policies, guidelines and programs for the retention and enhancement of remnant vegetation on roadsides, public spaces and in new developments.

In pursuing the mission in its strategic plan the District Council of Yankalilla is committed to the principles of Ecological Sustainable Development and the preservation and enhancement of the natural and historical assets of the district.

The Roadside Vegetation Management Plan is an important component of enabling the above outcomes to be achieved.

Policies and guidelines developed under the RVMP will assist in managing road activities in such a way as:

- to benefit rather than harm the roadside vegetation;
- to not disturb stable land;
- to not damage areas of indigenous vegetation; and
- to remedy soil erosion.

This Roadside Vegetation Management Plan describes the roadside vegetation of the Southern Fleurieu Peninsula and identifies management issues relevant to both the District Council of Yankalilla and the City of Victor Harbor (refer to section 2.4, Role of RVMP).
The following extracts are taken from the Local Government Act 1999:

**Permits For Business Purposes**

222
A person must not use a public road for business purposes unless authorised to do so by a permit.

*Examples*
- carrying on business from a pie-cart drawn up on the side of the road.
- establishing a kiosk on the side of a road.
- extending the business of a restaurant or café to outside tables situated on a footpath or roadside.
- depasturing stock.
- cropping.
- a permit may grant rights of exclusive occupation in relation to part of a public road.
- a permit may be granted for a particular occasion or for a term stated in the permit.
- the term of a permit cannot exceed five years.
- this section does not apply to a person who is simply travelling along a road.

**Public Consultation**

223
If a Council proposes to grant an authorisation or permit that confers a right of exclusive occupation; or that would have the effect of restricting access to a road; or in relation to a use or activity for which public consultation is required under the regulations; must before granting authorisation follow the relevant steps set out in its public consultation policy.

The Council must also give written notice of the proposal to agencies that are, under the regulations, to be notified of the proposal.

**Conditions of Authorisation or Permit**

224
A Council may grant an authorisation or permit under this Division on conditions the Council considers appropriate.

*Examples*
The conditions could for example:
- require compliance with specified safety requirements;
- require the person to whom the authorisation or permit is given to carry out specified work (or additional work) such as earthwork, drainage work and fencing;
- require specified insurance or indemnities;
require the maintenance of structures erected or installed, or vegetation planted, under the authorisation or permit in good condition and to specified standards;

- in the case of an authorisation or permit given for business purposes, require the payment to the Council of rent or other consideration;

- require the removal of a structure erected or installed under the authorisation or permit at the end of a stated period.

**Cancellation of Authorisation or Permit**

225 A Council may, by notice in writing to the holder of an authorisation or permit, cancel the authorisation or permit for breach of a condition.

However, before the Council cancels an authorisation or permit, the Council must give the holder of the authorisation or permit a written notice of the proposed cancellation stating the grounds on which the Council proposes to act and allowing the holder a reasonable period to make written representations to the Council on the proposed cancellation; and consider any representations made in response to the notice.

The period allowed under subsection (2)(a) must be at least one month unless the council determines that a shorter period should apply to protect the health or safety of the public, or otherwise to protect the public interest.

**Trees**

232 Before Council plants vegetation, or authorises the planting of vegetation on a roadside, Council must (in addition to complying with any other statutory requirement) give consideration to whether the vegetation is, on balance, appropriate to the proposed site taking into account:

- environmental and aesthetic issues;

- the use and construction of the road (including the potential for interference with the construction of the road or with structures (including pipes, cables, fixtures, fittings or other objects);

- road safety matters;

- other matters considered relevant by the Council;

- the impact that vegetation may have on residents and the proprietors of nearby businesses.

Council is also responsible for the preparation and revision of the district’s Bushfire Prevention Plan, as discussed under Country Fire Service below.

The Roadside Vegetation Management Plan has also been prepared for endorsement by the Native Vegetation Council with respect to required management of remnant roadside vegetation.
d) **Department for Transport, Energy and Infrastructure**

**Department for Transport, Energy and Infrastructure** (DTEI) is responsible for the construction and maintenance of approximately 12,000 kms of major roads in SA. Planning for the management of vegetation along DTEI roads is being developed through Roads Environmental Management Plans. The plans are developed in consultation with local councils, CFS, local Bushfire Prevention Committees, and the local community.

e) **Natural Resources Management Council**

The Natural Resources Management Council has an interest in roadsides in relation to their potential as a source of weeds and as a refuge for rabbits and other vermin. The work of the Natural Resources Management Council (NRM) is governed by the *Natural Resources Management Act 2004*. Under Section 13 of the Act the Council is required:

13(1)(g) To develop, implement and advise on coordinated programs for the destruction or control of animals and plants that are required to be destroyed or controlled in pursuance of the Act.

13(1)(I) To consult and cooperate with the Minister for Environment and Heritage and the Department of Environment, Heritage and Aboriginal Affairs in the implementation of any programs devised by that Department with the approval of that Minister for the control of native animals’.

13(1)(j) To consult and cooperate with the Minister for Environment and Heritage and the Department for Environment Heritage and Aboriginal Affairs in the control of animals and plans for the protection of native animals and plants.

The Council may recommend the establishment of a control board in relation to the area of a single Council or the combined area of two or more Councils.

Under Section 24(b) Boards are required:

To cooperate with the Council, other control boards and any prescribed control body in the development and implementation of coordinated programs for the destruction or control of animals and plants that are required to be destroyed or controlled.

Under Section 59(1) Boards are responsible for the control of weeds on roadsides. Section 64(1) of the Act provides that:

A person shall, in taking measures for the destruction or control of animals or plants, take all reasonable steps to ensure:

(a) that no native trees or shrubs are destroyed or unnecessarily damaged;

(b) that damage to or destruction of native vegetation (other than trees or shrubs) is kept to a minimum.
f) **Country Fire Service**

The Country Fire Service is responsible for the prevention, control and suppression of fires in the country. Under Section 5(1) of the *Fire and Emergency Services Act 2005* the Country Fire Service Board is responsible for fire prevention planning. *Bushfire Prevention Plans are prepared by local Councils. This process of planning is monitored by the CFS Board.* The Board is also required to ensure that in the preparation, maintenance and implementation of those plans, proper land management principles are taken into account. Regional and District Bushfire Prevention Committees have corresponding responsibilities to the Board, but at the regional and district level. The requirement to take account of proper land management principles implies that bushfire prevention planning should take into account land use planning activities and documents, and more particularly in the present context, take into account any plans for the management of roadside vegetation.

The South Australian Bushfire Prevention Advisory Committee reports to the Minister. It is comprised of representatives of organisations with an interest in land management and fire management, and is potentially a vehicle through which ideas related to roadside vegetation management could be introduced.

The CFS has an interest in roads both as fire control lines, and in relation to the fire characteristics of roadside vegetation, including weeds.
2.2 Local, State and Federal Government Plans

The SFP RVMP aims to be consistent with local government, Federal and State plans. The following documents support major elements of this Plan:


Intergovernmental Committee for ESD, Commonwealth of Australia, Canberra

National Biodiversity Strategy Review Task Group, Canberra

ARRB TRANSPORT Research, Research Report No. 317

ALGA, Canberra

Austroads, Sydney

*A Weed Strategy for South Australia* (August 1997)
Weed Strategy Committee for the Natural Resources Council of SA

Department of the Environment and Water Resources, Canberra

Mt Lofty Ranges Regional Strategy Plan (1993)
DENRUD, Adelaide SA

Mt Lofty Ranges Catchment Program Strategic Plan (1995)
MLRCP, Mt Barker

Mt Lofty Ranges Regional Revegetation Strategy (1999)
PIRSA, Adelaide

Fleurieu Animal & Plant control Board – Strategic Plan (1999)
Fleurieu APCB


Local Agenda 21, The South Australian Experience (1999)
DENRAA & LGA, Adelaide SA

LGA Coastal Management Strategy (2003), Brian Caton

2.3 Council Responsibilities for Road Reserve Management

The City of Victor Harbor is responsible for the management of unmade road reserves and approximately 265km of made roads. At a typical road width of 20 metres this amounts to over 500 hectares of land.

The District Council of Yankalilla is responsible for the management of 113km of sealed roads, 375km of formed roads and 48 km of unformed roads. At an average width of 20 metres this amounts to over 1,000 Hectares.

Under the *Local Government Act 1999* any disturbance or removal of roadside vegetation requires the permission of the appropriate local government authority. Under the *Native Vegetation Act 1991* such removal or disturbance also requires the permission of the Native Vegetation Council unless a specific exemption applies under the Native Vegetation Regulations 2003.
2.4 Role of the Southern Fleurieu Peninsula Roadside Vegetation Management Plan (RVMP)

This RVMP has been developed to provide a basis for managing roadside vegetation in accordance with the requirements of the Native Vegetation Act 1991. It contains:

- A summary of activities that may affect roadside vegetation and guidelines for undertaking these activities.
- An assessment of risks to roadside vegetation.
- Details of how this RVMP will be implemented.
- Procedures for environmental assessment and approval prior to implementation of road works.
- Requirements for reporting and review.
- Details of the Southern Fleurieu Peninsula roadside vegetation survey and roadside marker scheme.

This RVMP applies not only to road works (maintenance or minor construction) but to other uses of roadsides such as service provision, pest animal and plant control, property access, and bushfire prevention.

A RVMP does not apply to major construction projects involving the disturbance of significant areas roadside vegetation. Major construction works require a separate approval from the Native Vegetation Council.
2.5 **Relationship Between the RVMP and Existing Council Management Systems**

The development of this RVMP will assist both Councils to formulate strong and practical procedures to:

- protect roadside vegetation;
- provide a safe and functional road network;
- assist in the training of Council road maintenance and construction staff;
- design guidelines for Council staff and other businesses and service utilities undertaking works within the road corridor;
- reduce the need for Native Vegetation staff to assess minor clearance requirements.
- More detail will be added to this section as councils develop their policies and strategies.
2.6 Roadside Vegetation Management Categories

The RVMP identifies 5 categories for the classification of roadside vegetation including:

Category 1 – Roadside has very little weed invasion and supports a good representation of original flora. Management – monitoring only

Category 2 – Roadside contains moderate weed infestation, weed free areas are small and the original flora is still dominant. Management – Retrievable to category 1 with minimal effort for relatively quick reward

Category 3 – Considerable weed infestation amongst original flora. Management – Retrievable to Category 2 but requires considerable effort over long haul; no managerial help will lead to Category 4.

Category 4 – Weeds dominate area, indigenous understorey flora reduced to scattered clumps and individuals. Management – Potential revegetation site for indigenous species or developmental for ornamental use.

Category 5 – No indigenous understorey vegetation present. Management - ‘Greenfields’ revegetation site or well-managed as ornamental site.
2.7 Distribution of this Document

Initially 14 copies of the RVMP will be produced, these will be distributed to Councils Works and Infrastructure Manager, Assistant Works Manager, Natural Resource Officer, Operations Manager, Infrastructure Engineer, Director of Technical Services, Parks and Recreation Coordinator and City Manager. Several copies will also be allocated to the Victor Harbor and Normanville Natural Resource Centres, and the Victor Harbor and Yankalilla Library.

Responsibility for keeping each copy current will be Yankalilla’s Works and Infrastructure Manager and Victor Harbor’s Parks and Recreation Coordinator.

The Plan will be reviewed initially after 3 years and then every 5 years.
Section 3 Management Guidelines

3.1 Road Management Guidelines

The following sections describe how management issues will be addressed, with reference to relevant policy and objectives, standards and consultation or assessment that may be required. Guidelines and procedures aimed at identifying and protecting areas of significant roadside vegetation during the planning and implementation of strategies for roadside work are included under these headings.

Reference is made in the following sections to the information in the management matrix which indicates the management practices that are acceptable within different categories of roadside vegetation.

Procedures for assessment and approval of vegetation clearance are referred to in each section. Conditions when formal NVC clearance application is required are outlined.

It is recognised that management measures minimising the impact of roadwork activities on roadside vegetation might also result in the reduction of road and roadside maintenance costs.

3.1.1 Glossary

For the purposes of this Roadside Vegetation Management Plan the following definitions apply:

- **Road Reserve**: a corridor of land (generally 20 metres and occasionally 10 metres wide) bordered by property boundaries.

- **Roadside (or road verge)**: that portion of land within the road reserve bordering the carriageway.

- **Crossfall**: the slope of the road surface to shed water.

- **Carriageway**: the area of unsealed road on which vehicles drive.

- **Travelled Way**: the area of sealed road on which vehicles drive.

- **Unmade Road Reserve**: a road reserve not developed for the passage of vehicles.

- **Vegetation**: any living or dead plant material (trees, shrubs, groundcovers including herbs, grasses, reeds, rushes and other aquatic species).

- **Native Vegetation (From Native Vegetation Act 1991)**:
  Any plant species indigenous to South Australia, including plants growing in or under waters of the sea, but does not include:
  a) A plant or part of a plant that is dead unless the plant, or part of the plant, is of a class declared by regulation to be included in this definition, or
  b) Plants intentionally sown or planted by a person, except where the planting was undertaken in compliance with a condition imposed by the Native
Vegetation Council (or the Native Vegetation Authority under the 1985 vegetation clearance legislation), or in accordance with an order of the court under the Native Vegetation Act (or the 1985 clearance legislation)

In this context native vegetation does include dead trees of a species indigenous to South Australia if:
   a) The diameter of the trunk at 300mm from the base is 600mm or more, and
   b) The tree provides or has the potential to provide, or is a part of a group of trees or other plants (whether alive or dead) that provides, or has the potential to provide, a habitat for animals of a listed threatened species under the EPBC Act.

- **Indigenous (or native) Vegetation:** local native vegetation species of the type occurring prior to European settlement.

- **Remnant Vegetation:** surviving indigenous vegetation.

- **Exotic Vegetation:** non Australian native plants.

- **Ornamental Vegetation:** exotic plants and non-indigenous Australian native plants.

- **Pest Animals:** non - native animals that damage, destroy or are a nuisance to agriculture or native plant and animal communities.

- **Proclaimed Plants:** weeds listed by the Natural Resource Management Board that threaten the agricultural productivity of the region, the environment and the safety of the public.

- **Provenance:** the genetic composition of local native species, ie Hakea muelleriana Victor Harbor form.

- **Pest Plants/Weeds:** unwanted and invasive plants that have the ability to colonize roadsides and remnant vegetation (usually exotic, but can be plants from other parts of Australia).

- **Table/ side drains:** collect runoff from road surface, overland flow and cut batters.

- **The Southern Fleurieu Councils:** for the purpose of this plan includes The District Council of Yankalilla and the City of Victor Harbor.

- **Threatened Species:** indigenous flora or fauna that has a rating of either endangered (E), Vulnerable (V), threatened (T) or rare (R) at a national, state or regional level. A species can be threatened at one or more of these levels (IUCN 1994).

- **Significant:** attributed to features of special value including vegetation, landscapes and cultural heritage.

- **Trails:** a series of designated routes (on-road and/or off-road) allowing people to experience a range of recreational pursuits, including walking, cycling and horse riding.
• **Clearance (from Native Vegetation Act 1991):**
  
a) Killing, destruction or removal of native vegetation  
b) Severing of branches, limbs, stems or trunks of native vegetation  
c) Burning of native vegetation  
d) Any other substantial damage to native vegetation, and includes the draining or flooding of land  

• **Clearance Envelope:** the area above and around the road surface which must be clear of obstructions for legal obligations and to maintain suitable visibility (refer to clearance diagram).  

• **Vegetation assessment:** provides technical advice on the existing vegetation and occurs at the planning stage of projects. It enables planning decisions to be made on the impact of options on the vegetation and habitat in accordance with environmental requirements.  

• **Vegetation Survey:** provides an assessment of the impact of the road proposal on the vegetation and occurs at the design stage of projects. It provides specific information regarding vegetation affected by roadworks.  

• **Windrow:** to form a long row or mound of spoil from a grader or other machinery.  

• **Maintenance Zone:** the area where vegetation is routinely trimmed or kept clear of vegetation to maintain the road (clearance envelope), table drains and other facilities.  

### 3.1.2 Acronyms

used in the Southern Fleurieu Peninsula Roadside Vegetation Management Plan (SFP RVMP)  

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>CFS</td>
<td>Country Fire Service</td>
</tr>
<tr>
<td>CP</td>
<td>Conservation Park</td>
</tr>
<tr>
<td>CVH</td>
<td>City of Victor Harbor</td>
</tr>
<tr>
<td>DCY</td>
<td>District Council of Yankalilla</td>
</tr>
<tr>
<td>DENR</td>
<td>Department of Environment &amp; Natural Resources</td>
</tr>
<tr>
<td>DWLBC</td>
<td>SA Department for Water, Land and Biodiversity Conservation</td>
</tr>
<tr>
<td>EPA</td>
<td>Environment Protection Authority</td>
</tr>
<tr>
<td>EPBC Act</td>
<td>Environment Protection and Biodiversity Conservation Act (1999)</td>
</tr>
<tr>
<td>MLR</td>
<td>Mt Lofty Ranges</td>
</tr>
<tr>
<td>NPW Act</td>
<td>National Parks and Wildlife Act (1972)</td>
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<tr>
<td>NRM Boards</td>
<td>Natural Resource Management Boards</td>
</tr>
<tr>
<td>NVC</td>
<td>Native Vegetation Council</td>
</tr>
<tr>
<td>NV Act</td>
<td>Native Vegetation Act (1991)</td>
</tr>
<tr>
<td>PIRSA</td>
<td>Primary Industries and Resources South Australia</td>
</tr>
<tr>
<td>RVMP</td>
<td>Roadside Vegetation Management Plan or the Southern Fleurieu Peninsula RVMP</td>
</tr>
<tr>
<td>DPTI</td>
<td>Department of Planning, Transport &amp; Infrastructure</td>
</tr>
</tbody>
</table>
3.1.3 Hierarchical Road Classification System

Under the Austroads functional classification of rural roads the following general classifications apply:

ROAD CLASSIFICATION

Class 1.
Principal connections between capital cities under DTEI control (none in this region).

Class 2.
Rural Arterial Roads under DTEI control (eg Adelaide Road, Main South Road).

Class 3.
Rural Arterial Roads. Under Council control (eg Range Road).

Classes 4 – 5.
Refer to Council’s Hierarchy Classification.
**Functional Road Classification**

The Austroads functional classification does not provide information on the design standards for a particular road classification.

The District Council of Yankalilla and the City of Victor Harbor have classified rural roads according to the primary purpose and level of use. General fit for purpose standards (i.e., width) have been applied to each classification.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Sealed</th>
<th>Unsealed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arterial (Class A)</strong> –</td>
<td>roads generally 7.5 m travelled way with unsealed shoulder 1.2 m wide.</td>
<td></td>
</tr>
<tr>
<td><strong>Collector (Class B)</strong> –</td>
<td>Sealed 6m travelled way with unsealed shoulders 1.2m wide</td>
<td>Unsealed roads 8 m carriageway</td>
</tr>
<tr>
<td><strong>Local (Class C)</strong> –</td>
<td>Unsealed roads 6-8 m carriageway</td>
<td></td>
</tr>
<tr>
<td><strong>Minor (Class D)</strong> –</td>
<td>Unsealed roads 5-6 m carriageway.</td>
<td></td>
</tr>
</tbody>
</table>
MAINTENANCE STANDARDS & VEGETATION CLEARANCE ZONES

It is essential that vegetation along road sides be maintained to provide safe clearance for road users.

Clearance along roads will vary depending on the road type and the presence of roadside furniture (ie sign guide posts). The removal of regrowth within the clearance envelopes, using low impact methods, may be undertaken in accordance with the following notification requirements.

Notification Requirements:

- Clearance of vegetation less than 5 years old does not require approval.
- Consolidation is required with the Native Vegetation Council Secretariat for vegetation between 5 to 10 years old.
- If native vegetation is over 10 years old and within the approved clearance envelope then approval must be sought from the Native Vegetation Council.

Note: any clearance of native trees with a stem greater than 100mm diameter requires NVC approval.

Clearance approval is required if removal is undertaken using high impact methods (eg bulldozer).

Clearance approval is required if roads are widened or clearance is undertaken beyond previously established safety standards.

Clearance Envelopes

UNSEALED COUNCIL ROADS
Clearance undertaken in accordance with Figure 3.1.

SEALED COUNCIL ROADS

Rural Sealed Roads:
Clearance in accordance with Figures 3.2 and 3.3

Township Streets:
Clearance in accordance with Figures 3.2 and 3.4
Wherever possible, roads should be maintained at current carriageway widths and within previously cleared areas. Any additional clearance required to allow for carriageway widening requires approval from the Native Vegetation Council. Heavy vehicles and over-dimension vehicles should be encouraged to use routes that avoid the need for widening or excessive vegetation control. In addition roads should be developed within road reserves that contain poor quality or no native vegetation. An inventory of roadside vegetation quality, road reserve width, and preferred freight routes can be used to review the current road classification to allow for preservation of environmental values.

To service dairies, milk tankers must travel rural roads daily and fire vehicle access must be maintained to all district roads, therefore the majority of roads covered in this RVMP are used by heavy vehicles.
3.2 Road Construction

The construction of a new road or the widening of an existing road surface, to a width greater than specified for that category and where that work involves the clearance of native vegetation, will require an application to and consent from the Native Vegetation Council. The width or area of vegetation and vegetation quality (condition) should be considered when evaluating options to widen. One wide roadside is preferable to two narrow roadsides. If widening is necessary where native vegetation is present on both sides, widen on the narrow roadside. Roadside vegetation is of greater value where native vegetation occurs on adjoining land.

Roadworks such as the construction of new roads along previously undeveloped road reserves and widening or realignment of existing roads, potentially pose significant environmental impacts and it is important that the vegetation is assessed by a Council officer responsible for Natural Resource Management prior to the commencement of works. The Council officer will determine if external assessment is required to comply with the SFP RVMP or the NVC ‘Guidelines for the Management of Roadside Vegetation’.

If significant vegetation is present it may be possible to modify the roadworks to reduce or avoid critical impact. All alternatives should be fully explored.

Particular attention needs to be given to shrub and groundcover plants which includes most of the State’s threatened species.

Consultation and Approval Procedures

(a) Clearance approval from the Native Vegetation Council is required for new roadworks (ie new road, widening of carriageway, realignment) which involves clearance of native vegetation.

NOTE: This requirement does not apply to very minor and localized clearance, such as pruning of branches or removal of one or two tree saplings or shrubs which are known to be common in the area. However, even in these cases it is recommended that the Native Vegetation Conservation Section be advised prior to the work. It is possible that the site may contain a small, visually insignificant plant species (eg orchid or native grass) which is of particular conservation significance. A telephone call to the Section will enable records to be checked.

(b) Local Councils are asked to provide advice on an annual basis to the Native Vegetation Conservation Section regarding new roadworks planned for the forthcoming year in areas of native vegetation. In order to avoid construction delays it is important to advise the Native Vegetation Council of proposed native vegetation clearances.

Any application to the Native Vegetation Council should include the following details to enable reasonable assessment of the proposal:
Each new application proposal should describe the nature and extent of impact on roadside vegetation based on:

- The design footprint.
- Any workspace required (eg. temporary stockpiling, vehicle turning, overnight parking areas etc).

The proposal should also explain:

- The alternatives that were considered in the planning and design process to minimise the impact;
- Measures to manage activity and minimise impacts during construction (eg in a Construction Management Plan);
- Measures to rehabilitate disturbed areas following construction.
- Any measures to offset the proposed clearance, which after allowing for the loss of vegetation, will result in a significant environmental benefit (ie. Set aside Area), as required under the Native Vegetation Act 1991.

3.2.1 Construction and Road Widening Works

**POLICY: 2** (a full list of the policies from the SFP RVMP can be viewed on page 6)

*Council road construction work will be in accordance with the RVMP and accompanying guidelines and have regard to best practice principles for environmental management.*

In order to achieve maximum conservation of vegetation during road construction or road widening activities, it is essential to plan carefully.

Wherever possible new roads should be constructed on land free of remnant vegetation. When existing roads are widened and vegetation threatened, careful planning for rehabilitation combined with innovative approaches can help to maximise the conservation of existing roadside vegetation.

As applicable, seek approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (see p16).

Road construction (pavement widening, curve realignment, reconstruction and sealing, intersection modification, etc) will require referral to the Native Vegetation Council if additional clearance of native vegetation, outside of clearance zones previously established is undertaken.
GUIDELINES

All construction works should be specified in accordance with the following guidelines.

All works should be kept to the minimum necessary to maintain a safe road according to the classification and function of the road.

Vegetation

Where the works proposed have a significant impact on flora or fauna, a concept plan will be displayed publicly. The Operations Manager will determine the display time period with regard to the extent of works.

A notice should be placed in the local paper for the same time period detailing proposed works and the location of the concept plan. At this time Council should also request help from any individuals or groups interested in collecting seed to be used in rehabilitation works, if this is appropriate. (See Section Rehabilitation p63).

All comments received should be recorded and considered prior to the preparation of final plans.

The final plan if amended will be displayed publicly for a period of time determined by the Operations Coordinator. A notice should be placed in the local paper detailing works and location of the final plan.

The following information will be listed and clearly marked on the final plan:

- vegetation affected;
- vegetation to be retained;
- rehabilitation works;
- location of stockpile and dump sites;
- machinery and vehicle parking sites;
- access roads;
- erosion control including drainage and temporary silt traps; and
- location of proclaimed weed seed banks.

On Category 1 or Category 2 roadsides work areas or zones should be identified on ground and where necessary marked out before road construction works commence. Vegetation beyond the road formation will not be disturbed, except where necessary to carry out required works.

Ensure that construction staff and contractors are instructed in vegetation management.

When conducting works on the road formation care must be taken to avoid the roots of trees and shrubs. Avoid works inside the drip line of trees. Fencing, barricades or suitable marking should be erected to minimise root damage and soil compaction.

Change of ground level near vegetation should be avoided. This can impact on native vegetation by altering the water and oxygen available to plants.
Sealed surfaces should not be placed hard against vegetation. This can restrict water and oxygen reaching the roots.

Larger significant vegetation growing close to the road shoulder may be considered a road safety hazard. Guardrails could be used to protect vegetation by providing a visual and physical barrier.

Construction works should be carried out at a time of year that is neither too wet nor too dry, whenever this is possible.

Construction works will be undertaken in stages so as to expose the smallest work area for the shortest time, whenever this is possible.

If seasonal constraints allow rehabilitation of the site will begin immediately prior to completion of works.

Drainage systems and batters will be designed to control erosion and minimise damage from runoff. For more information, specialist documents should be consulted. (Including Environmental Practices for Rural Sealed and Unsealed Roads, and Unsealed Roads Manual – Guidelines to good practice).

Vehicles and machinery will be confined to access tracks and existing or proposed road alignments.

The appropriate type and size of machine that minimises disturbance to vegetation and enhances the chances of successful rehabilitation of the site will be used for road construction works.
3.2.2 Environmental Code of Practice for Construction Workers

GUIDELINES

Include in all relevant tender documents and plans for construction a detailed site rehabilitation plan.

Plan site rehabilitation works well in advance, preferably the year prior to commencing works to allow for thorough site assessment including vegetation and weed identification, seed collection, tubestock propagation, and planning to achieve successful rehabilitation of the site.

Provision be made for weed control during and after site rehabilitation.

Retain on site habitat resource material such as dead trees or limbs containing hollows, rocks, boulders, and tree foliage.

Identify areas of weed and pathogen infestation prior to commencement of work.

Clearly mark the limits of stripping and all other construction zones.

Always stay within the construction zone.

Keep machinery and stockpiles on cleared land.

Only use the appropriate type and minimum size of machine for the job.

Plan vegetation removal.

If there is no alternative to burning, do not burn under or near desirable vegetation.

Chip light material left over from tree removal into mulch to spread the local seed.

Strip and stockpile topsoil from areas of good native vegetation. Re-use as soon as possible.

Control erosion by:
- minimising vegetation removal and encouraging the growth of vegetation on batters;
- leaving batters rough to hold topsoil;
- limiting access and earthworks to the area required for construction; and
- the establishment of adequate drainage systems.

Do not “tidy up” roadside vegetation after construction.

Clean down machinery before moving to another site.

Walking the route involves inspecting the construction alignment before construction commences to confirm and mark the limits of all construction activities (the construction zone).
This should involve the Engineer/Works manager, Construction Coordinator, Environmental Officer and, where necessary, consultation with the Department of Environment and Natural Resources.

**To minimise the impact of construction on vegetation**, the following should be identified:

- significant or protected vegetation and sensitive areas which are to be protected from disturbance;
- the exact location of stockpiles, plant compounds and access roads.

Keep **Machinery and Stockpiles** on Cleared Land.

**Locate soil stockpiles** containing listed weed seed bank in the most degraded area of the site.

**Stockpiles and construction compounds** should be located on land already cleared of native trees, shrubs and grasses. This may be available on nearby private land.

Do not store materials or machinery under trees to avoid compaction of the soil which may kill trees and smaller native plants.

**Mark stockpile areas** with a fence, bunting or large logs to prevent the stockpile area from spreading.

Do not push stockpiles into surrounding vegetation.

**Stay within the “Construction Zone”**. The construction zone is the area marked out with pegs or bunting and where all construction activities take place (such as the area stripped for road construction, stockpile areas, compounds etc.).

**Disturbance by machinery** can do significant damage to large areas of native vegetation. Stay within the marked construction zone and confine machinery to well defined access tracks.

**Select the most appropriate machinery and equipment for the job** to reduce damage to roadside plants. For example, a backhoe can minimise disturbance to vegetation by remaining on the road shoulder, whereas a bulldozer is more destructive since it must manoeuvre within the vegetation.

**Minimise disturbance of soil and healthy vegetation to avoid:**

- the increased risk of soil erosion;
- encouraging weeds, which compete with regenerating native trees and shrubs;
- the increase in rehabilitation costs;
- the increase in future maintenance costs; and the
- the increased fire risk to roadsides.

**Native grasses and young regenerating trees and shrubs** may not be obvious. Marking with stakes or using a star picket and strand wire fence can protect them.
Stockpile topsoil from areas of native vegetation. Topsoil contains plant nutrients, soil biota and the seeds of local native plants. Make sure that weedy topsoil is not imported from another site into good native vegetation.

Strip the upper 100 – 200mm of topsoil before starting any major works, make sure that topsoil is not mixed with poor subsoil.

Locate soil stockpiles in cleared areas, away from existing drainage lines, trees, shrubs and native grasses. Remove any weeds before stockpiling by spraying or scalping.

Topsoil should ideally be stockpiled for less than 12 months to make sure that the seed in the soil remains viable.

Avoid “Tidying Up” Vegetation. Grading the roadside, spreading topsoil into vegetation and thinning out plants causes unnecessary disturbance to the soil and vegetation and spreads weeds.

Leaving vegetation undisturbed wherever possible during construction reduces the need for costly and destructive post construction ground repairs.

Shrubs, logs, old or dead trees and small native plants are valuable for wildlife and should be retained wherever possible unless they are a threat to safety or services, in which case they may be placed elsewhere on the roadside.

Regenerating indigenous vegetation will be protected and encouraged on all roadsides in the Council district except where:

- roadsides are designated as strategic or tactical firebreaks as specified in the District Bushfire Prevention Plan (See Section Bushfire Prevention);
- EDPTI overhead powerlines exist;
- EDPTI assets and strategic firebreaks exist;
- Service authorities locate their assets on the roadside (See Section Utility Services);
- Regenerating vegetation growing within the effective part of the table drain interferes with the working of the drain;
- Regenerating vegetation interferes with maintaining sight distances;
- Regenerating vegetation is on the road shoulder and interferes with the structure of the road;
- Regenerating vegetation interferes with structures and signs located on the road reserve;
- Road construction and road widening is necessary;
- Exotic plants of listed historical or cultural significance exist in the road reserve;
- Formal crossings exist.

Minimum disturbance and bush for life techniques should be used as the preferred approach to site rehabilitation works.

Consider opportunities to develop buffer zones to extend the value of roadside vegetation.
With due regard to the Native Vegetation Act and the Local Government Act, **landholders must allow indigenous roadside vegetation to naturally regenerate** on the road reserve adjacent to their properties.

**Landholders should be approached to consider the buffer zone potential** of the area of their property adjacent to the roadside vegetation. Landholders can then be encouraged to undertake strategies, including fencing-off zones, to protect naturally regenerating or artificial plantings within the negotiated buffer-zone.

### 3.2.3 Road Construction Materials

**Borrow pits** will not be excavated where native vegetation will be disturbed.

**Topsoil** should be removed and stockpiled prior to road works and distributed over the site at completion. (See Section Rehabilitation p63).

**Materials required for road works on a daily basis** should, wherever safe, be temporarily stockpiled on the road formation, not the roadside. Alternatively materials could be placed on a cleared area in close proximity to the work site. (Check for native grasses and small or concealed native plants).

**Materials** used for construction works should be taken from **disease free and weed free areas**. When there is no alternative but to use soil or other materials from weed or disease infested sites the materials should only be used on Category 5 roadsides or in low conservation areas. **No material** should be taken from areas affected by **Phytophthora** or **Mundulla Yellows**.

### 3.2.4 Preparation of Road Construction or Road Widening Plans

**Preparation of road construction or road widening plans**, except on existing, Category 5 roadides, the Operations Coordinator and the officer responsible for Natural Resources and a Planning Officer will meet on site to walk or drive the proposed route. Where vegetation is threatened, plans will be designed in a way that has the least impact to existing remnant vegetation and minimises vegetation loss while allowing safe road construction. Information about the flora, and fauna of the proposed route should be obtained prior to the site inspection. Adjacent landholders and local people or groups with specialist knowledge of flora and fauna should be consulted and where necessary, included in the site inspection.
3.3 Road Maintenance

POLICY: 3

The District Council of Yankalilla and the City of Victor Harbor will require specifications for all maintenance and minor construction works to be in accordance with the RVMP and accompanying guidelines, and have regard to best practice principles for environmental management.

The level of maintenance and vegetation removal required to keep a road in safe and useful condition is dependant upon a number of factors. Traffic volumes, road geometry, type of hazard, road characteristics, accident records, road marking and allowable speed are all considered when determining the maintenance required for each road. Transport SA the authority in road construction has many publications specifying requirements. On minor roads with small traffic volumes maintenance required is usually less than a main road or highway.

In order to maintain a safe road system, minimise the risk and impact of fire and protect service assets it is sometimes necessary to remove vegetation. Great care must be taken to ensure that minimal removal achieves the desired outcome, according to the specific requirements of the road. All other vegetation should be disturbed as little as possible. It is also important that the method used to remove vegetation minimises impact to the plant and surrounding vegetation. Trees in particular require correct pruning to enhance the natural healing process and maintain shape and form. This would require some level of forward planning for maintenance programs.

It is compulsory that Council staff and contractors are aware of and comply with the following procedures and regulations prior to commencement of any roadwork:

- Relevant clearance envelope standards, maintenance standards, vegetation clearance zones (Section 3.4);
- The Roadside Vegetation Management Matrix (Table 4.5);
- The operational standards for road maintenance, including -
  (i) vegetation protection (Section 3.17)
  (ii) repairs (Section 3.3.1)
  (iii) sealing shoulders (minor construction) (Section 3.2.1)
  (v) minor road widening (minor construction) (Section 3.2.1)
  (vi) grading (Section 3.3.3)
  (vii) resheeting (Section 3.3.3)
3.3.1 Planning for Road Maintenance

During the planning and scheduling of road maintenance or minor construction program the following guidelines should be followed.

GUIDELINES

With due regard to the Native Vegetation Act 1991 all programs for works on roadsides will be supplied to the responsible authority and referred to the officer responsible for Natural Resources, as soon as the information is available.

The Native Vegetation Council will be consulted regarding all proposed works not exempt under the Native Vegetation Act 1991; i.e. all works involving clearance of native vegetation other than minor works such as tree-trimming and shoulder clearance for required risk management.

Road Maintenance (clearance of regrowth vegetation for patrol grading, drain clearing, maintaining clearance for passage of vehicles, pavement re-sheeting, pothole repairs etc) would require:

- External (NVC) assessment and approval if clearance exceeding previously established safety standards is proposed, or where regrowth has reached the stage where high-impact methods (eg. bulldozing) are proposed.

- No external approval is required for clearance with the clearance envelope if the vegetation is less than 5 years old and has a stem diameter less than 100mm.

3.3.2 Relevant Clearance Envelopes

All roadwork staff or contractors must comply with the relevant clearance envelopes (Figures 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 and 3.7). In most instances roads would have been cleared to the necessary safety standard – ie. the widths specified in the clearance envelope diagrams, and thus clearance of regrowth within these envelopes can occur without approval. However, new clearance, including clearance required on a particular road that for some reason has not been cleared in the past to the standard indicated in the clearance envelopes in this Plan, would require an application under Regulation 5(1)(d) – Infrastructure in the public interest (or possibly, once a process has been developed, under 5(1)(lb) to protect public safety). Subsequent clearance of regrowth vegetation could then occur according to the approved clearance envelope dimensions in this Plan.

3.3.3 Operational Standards for Road Maintenance Activities

The following section covers operational activities and includes repairs, shoulder sealing, minor road widening, grading, resheeting in order to protect native vegetation.

It also details how the placement of temporary infrastructure, including camps, stockpiles and heavy vehicle turnarounds, will be determined and managed (including rehabilitation of sites).
As applicable, seek approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

**Code of Practice**

The Department of Transport Environmental Code of Practice for Road Maintenance Workers, should be used in conjunction with the following guidelines

**GUIDELINES**

*All maintenance or minor construction* must comply with the following standards.

*All works should be kept to the minimum necessary* to maintain a safe road according to the classification and function of the road.

*On Roadside Vegetation Category 1 or Category 2* roadsides work areas or zones should be identified on ground and where necessary *marked out* before road maintenance works commence. Vegetation beyond the road formation will not be disturbed, during road maintenance works, except where necessary to carry out required works.

*It is the responsibility of councils Works Manager* to ensure that *maintenance staff* are instructed in vegetation management to the standards outlined in this RVMP.

When carrying out works on the road formation care must be taken to avoid the *roots of trees and shrubs*.

*Avoid* works inside the *drip line of trees*.

Fencing, barricades or suitable marking should be erected to minimise *root damage and soil compaction*.

*Change of ground level* near vegetation should be avoided. This can impact on native vegetation by altering the amount of water and oxygen available to plants.

*Sealed surfaces* should not be placed hard against vegetation. This can restrict water and oxygen reaching the roots.

*Larger significant vegetation* growing close to the road shoulder may be considered a road safety hazard. Guardrails could be used to protect vegetation by providing a physical barrier.

*Road shoulders* and *gravel roads* should be *graded* to the minimum required to maintain the road formation and the condition of the road as specified by the Operations Manager.

*Roadwork construction materials* should not be sourced from areas known or suspected of containing plant diseases like Phytophthora or Mundulla yellows.

*Borrow pits for road maintenance materials* will not be excavated from the roadside unless it is within the work area and no vegetation will be disturbed.
Topsoil should be removed and stockpiled prior to road works and distributed over the site at completion.

Materials required for road works on a daily basis should, wherever safe, be temporarily stockpiled on the road formation, not the roadside, or on a cleared area in close proximity to the work site. (Check for native grasses and small or concealed native plants).

Stockpiles and waste storage sites should be located throughout the municipalities, to allow quick and easy access during roadwork operations but away from high and medium conservation roadsides and in areas with effective drainage systems.

When stockpiles or waste storage sites are no longer required they should be either rehabilitated or converted to another use such as a wayside stop.

Suitable sites for heavy vehicle turn arounds and camps shall be determined by the works manager during the planning process and prior to maintenance or construction.

Research current literature for locations of plant disease sites like Phytophthora or Mundulla Yellows prior to maintenance or construction.

If operating in an area known or suspected to contain plant diseases like Phytophthora or Mundulla Yellows ensure equipment / machinery is decontaminated according to the appropriate procedure.

If operating in an area known or suspected to contain weed seeds or other propagative materials ensure equipment / machinery is decontaminated according to the appropriate procedure.

All camps, turn arounds, material stockpile sites and borrow pits will be returned to original conditions, converted to another use (e.g. a wayside stop) or revegetated with local species.

Exclusion Zones

Some suitable marking will be constructed to:

- Clearly delineate the boundaries of all construction operations prior to road works. Vegetation beyond the construction zone will not be disturbed.
- Clearly delineate work zones from vegetation to be retained within the construction zone. Vegetation retained within the construction zone will not be disturbed. See responsibility table, page 118 – 119.
- Include the drip line of trees in the protected zones, to minimise root damage and soil compaction.
- Exclude local quarantine areas.

3.3.4 Rehabilitation

To successfully rehabilitate a disturbed site in areas where indigenous vegetation has been removed will require careful planning and expert advice well in advance of the commencement of works.
The most cost effective and environmentally effective means of restoring a disturbed site is by natural regeneration utilising seed and mulch collected from the original worksite vegetation. In some cases additional revegetation works using seed collected locally may be required to accelerate the process and achieve an acceptable result.

GUIDELINES

Use minimum disturbance techniques as the preferred approach to site rehabilitation works.

Consider opportunities to develop adjacent areas to extend the habitat and wildlife value of roadside vegetation.

With due regard to the Native Vegetation Act and the Local Government Act, landholders must allow indigenous roadside vegetation to naturally regenerate on the road reserve adjacent to their properties.

Landholders should be approached to consider the buffer zone potential of the portion of their property that is adjacent to roadside vegetation.

Landholders can then be encouraged to undertake strategies, including fencing-off land, to protect natural regeneration or artificial plantings within the negotiated buffer-zone.

In South Australia a policy offsetting the effects of vegetation removal, by replanting at a suitable nearby site, is advocated by the Native Vegetation Council. It is recommended that this policy be supported and adopted by the Southern Fleurieu Councils so that worksites can be properly rehabilitated with local native species.

In addition to the requirements of this policy the District Council of Yankalilla and the City of Victor Harbor have an annual budget for revegetation.

Both the DCY and the CVH encourage landholders, community groups and others to maintain and revegetate roadsides with suitable local native plants.
3.3.5 Vegetation Removal Associated with Road Maintenance and Minor Construction

The prime responsibility of Council as a road authority is to ensure safe and convenient transport routes. The assessment of roadside vegetation for removal must embody this responsibility.

POLICY: 4 (a full list of the policies from the SFP RVMP can be viewed on page 6)

The removal of vegetation associated with roadside maintenance and minor construction will be in accordance with the provisions of the Southern Fleurieu Peninsula RVMP and accompanying guidelines.

GUIDELINES

With due regard for the intent of the Native Vegetation Act, 1991, the Council in the first instance refer all plans to remove, destroy or lop any indigenous vegetation, to Council’s officer responsible for natural resource management. Where the council officer has concerns with the level of clearance proposed, or where the clearance doesn’t fit within the criteria of the RVMP (ie the Assessment and Approval Table, page 152 - 153) the Native Vegetation Council Secretariat DENR will be consulted to ensure compliance with the Act.

When approval has been given to remove, destroy or lop any vegetation (indigenous or otherwise), the responsible authority should ensure that no vegetation, other than that specified in the approval is removed, destroyed or lopped and that indigenous vegetation beyond the working zone is not disturbed.

The Local Government Act requires Council approval for removal of all indigenous and non-indigenous trees exceeding 4.5 metres in height, growing on land under the care and control of Council. It is recommended the following be obligatory when assessing trees for removal and prior to commencing works.

- An agreement be reached by the relevant officer of Council and the officer responsible for natural resource management as to the need for tree removal, such reasons being root invasion, sight vision, public safety and the safety of road users, visual amenity, etc.

- Consultation occurs with all relevant stakeholders.

- That nomination of a tree or trees for removal is not influenced by financial gain.

- That suitable replacement vegetation for the site or suitable alternative locations be considered.

- That where trees proposed for removal are of high amenity value, form part of Main Street landscapes, or are likely to become emotional issues, a report be given to Council or appropriate Council Committee seeking resolution.
Planning for Vegetation Removal

Section 142 of the Road Traffic Act allows for a maximum vehicle height of 4.6m metres. It is the responsibility of any road authority to ensure that vehicles of maximum height can safely travel on the road network.

**Any vegetation** that is required to be removed or lopped should be inspected prior to work commencing. Only the minimum vegetation necessary to meet required works will be removed.

When **entire native plants** are removed as a part of a construction program, sufficient replacement plants will be established at a suitable nearby site, so as to achieve an overall environmental gain.

When planning for **indigenous vegetation removal**, consider opportunities for plant rescue and or collection of propagating material.

When planning for **non-indigenous vegetation removal**, consider a range of uses for the resource of the felled material. Eg. Firewood, mulch, habitat.

**Timing of pruning or tree felling** should take into account seasonal bird nesting; and should accommodate seed collection opportunities.

Works planning should incorporate opportunities to liaise / negotiate with **adjacent landholders** where appropriate, to achieve best outcomes and minimise work site impacts.

Eg. Utilising private property to:
- Access the work site to avoid trampling roadside understorey vegetation;
- Store plant and equipment;
- Stockpile prunings;
- Increase areas available for revegetation.

**All authorities/agencies** should look for opportunities to coordinate activities related to vegetation removal, to minimise disturbance to vegetation.
3.3.6 Design and Maintenance of Drains

**POLICY: 5**

Council will require specifications for all drainage design, construction and maintenance works to be in accordance with the RVMP and accompanying guidelines, and have regard to best practice principles for environmental management. *Clearance of native vegetation along existing drains is allowable (subject to internal district council approval), but clearance for new drains requires consultation with the Native Vegetation Council Secretariat and possibly, depending on the quality of the vegetation, NVC approval.*

Water sensitive rural road design demands that a number of objectives are met. These require the continuance of sufficient drainage of the road structure to ensure the safety of road users and integrity of the pavement, in addition to minimising the impacts of road drainage on the environment.

The following guidelines should be read in conjunction with:


**GUIDELINES**

**Table drains** will be designed to minimise the concentration and velocity of water runoff and to maintain the natural drainage line. Information on improving table drain design should be actively sought.

**Table drains** will be maintained in a condition that will under normal circumstances, (except at times of high rainfall) prevent water flooding the road reserve. Works must be kept to the minimum to meet these requirements.

Where vegetation growing within the effective part of a **table drain** interferes with the working of the drain or is a safety hazard it should be removed.

**All roadside vegetation** outside the effective part of the table drain will not be disturbed when drains are maintained.
3.4 Verge Maintenance for Road Safety

POLICY: 6

Council will require specifications for all clearance for sight distance and maintenance clearance envelopes to be in accordance with the RVMP and accompanying guidelines, and have regard to best practice principles for environmental management.

Sight distances will be maintained according to the classification speed environment of the road as specified by the Operations Manager. All vegetation to be removed to maintain sight distances and vertical.

3.4.1 Road Canopy Clearance

It is desirable to maintain a vertical clearance in accordance with Figure 3.2.

![Figure 3.2. Standard Vegetation Clearance (kerbed and unkerbed).](image)

Where existing vegetation growth makes it impractical to achieve the clearance envelope shown in Figure 3.2, and there is no significant impact on sight distance or road safety the restricted clearance envelope shown in Figure 3.3 will be upheld.
Figure 3.3. Restricted Clearance (kerbed and unkerbed).


Figure 3.4. Restricted Clearance - Dedicated Parking (minimum).

Secondary clearance envelopes will be provided around roadside furniture and signs as shown in the following figure.

**Figure 3.5. Clearance Around Roadside Furniture.**


In urban areas with medians a clearance envelope will be provided in accordance with the following figure.

**Figure 3.6. Clearance Over Medians.**

3.4.2 Sight Distance Clearance

On roads at junctions and intersections the clearance will be undertaken to allow for approach site distance and safe intersection sight distance, as described in the Austroads Guide to Road Design (Intersections and Crossings) Parts 4 and 4A unsignalised and signalised intersections.

Additional vegetation clearance may be undertaken on the approach side of signs and delineation devices to ensure that the sign is clearly visible from a distance equivalent to the stopping sight distance for the speed environment of the road (Figure 3.7).

Where native vegetation clearance is required, low impact methods such as slashing, trimming of individual limbs and rolling, are preferred for this type of work. High impact methods involving soil disturbance (eg grading or bulldozing) or the breaking of limbs, should be avoided. Low shrubs, native grasses and groundcovers generally do not affect road safety and, where possible, should be retained in the clearance zones. These species help prevent weed invasion and erosion and can reduce roadside management costs. Adoption of higher impact methods is strongly discouraged and may not be approved by the NVC.

Formal NVC approval for vegetation clearance will be required when vegetation removal is necessary outside the designated “maintenance envelope” or where management involves high impact vegetation control methods.
3.5 Installation and Maintenance of Services

POLICY: 7

Council will require specifications for all clearance for the installation of services to be in accordance with the RVMP and accompanying guidelines, and have regard to best practice principles for environmental management. The constructing authority and their agents will comply with the provisions of the RVMP.

Utility services such as electricity, gas, water and communications have traditionally been placed within road reserves. The location of such services is an important consideration in terms of vegetation conservation and potential risks that may be associated with poor management. Services are either located above or below the ground and the impact they have on the roadside environment varies depending on location, the vegetation present and the maintenance routine employed.

Existing underground services generally require little maintenance and are only accessed when there is a fault detected. Assessing the fault is more difficult compared to above ground services and can be expensive and time consuming. Above ground services generally require constant management, as they are more prone to faults, vandalism and accidental damage. Continual pruning of vegetation close to power lines is required to reduce the risk of fire. Special requirements may be needed for significant areas such as high conservation value vegetation or areas that contain rare, threatened or significant species. This may require special pruning or installation techniques, but must not increase the fire risk of the area.

It is Council’s intention that there will be no net loss of native vegetation for the installation of utilities. Where possible, utilities should be installed on existing cleared land.

Consultation with the Native Vegetation Council Secretariat is required when vegetation removal is necessary for new service installation and is not considered minor or where clearance is required in excess of existing Native Vegetation Council Approved Standards.

SA Water and Department of Transport, Energy and Infrastructure both have Native Vegetation Council approved standard operating procedures.

If clearance is considered minor (definition of ‘minor’ use same definition as the ‘Note’ on page 39 Section 3.2, or as determined in consultation with the Native Vegetation Council Secretariat) then no Significant Environmental Benefit (SEB) would be required. If clearance is not minor, consultation with the Native Vegetation Council Secretariat is required to determine the SEB required, unless working under an approved Standard operating procedure as mentioned above.

If clearance is not considered minor a SEB will be required either by the provider, Council or private landowner.

GUIDELINES

Minimise disturbance of remnant vegetation during the installation and maintenance of service assets whilst maintaining a safe operating environment for the asset.

Category 1, 2 and 3 roadsides must be avoided when planning for the location of new services. When the location of utility services conflicts with the protection of remnant vegetation on roadsides, alternative strategies need to be considered to ensure that the impact on any remnant vegetation is kept to a minimum.

Prior to approval of an application council’s officer responsible for natural resource management will inspect and report on the suitability and appropriateness of the proposed works.

Council work crews, individuals and businesses undertaking service installation or maintenance are required to gain Council authorisation in the form of a Job Environmental Analysis (JEA) prior to commencement of roadside activities. See Appendix 1.

All plans for works on roadsides will be supplied to the responsible authority and referred to the officer responsible for Natural Resources, as soon as the information is available, preferably one year in advance of works being undertaken. For day to day extension works from the system notice will be provided preferably three months but at least one month in advance of works being undertaken.

The design and installation of new services should involve route selection that avoids high and medium conservation areas.

Placing services underground with the use of small trenching equipment reduces the impact on the surrounding environment.

Many services can share trenches, which further reduces their impact on the environment and the work involved in their installation.

Consideration should be given to placing services on cleared private land to reduce the need to remove and prune vegetation, and avoid damage to existing tree root systems.

Incentive schemes or compensation payments could be employed to encourage landholders to accept services on their land.

Where the proposed installation of services involves clearance of roadside vegetation a site inspection with the constructing authority, the responsible authority, and the Native Vegetation Council Secretariat, DWLBC must be organised at the earliest opportunity, by the responsible authority, to determine the appropriate course of action. Any information about the flora, and fauna areas existing along the proposed route should be obtained prior to the site inspection. Adjacent landholders and any local people or groups with specialist knowledge of flora and fauna should be consulted and where necessary included in the site inspection.

Where the adjacent land is of lower conservation value than the roadside, the service should, wherever possible, be located on this land.
Where the roadside and the adjacent land are both of high conservation value, or where no agreement can be reached in regard to locating services on private land, an alternative procedure that has the least impact to vegetation will be implemented.

If major works are required that modify existing indigenous vegetation on roadsides, the site should be rehabilitated, by the constructing authority, if possible at least to the standard it was before works commenced. (To achieve this, consultation between the constructing authority and the Native Vegetation Council Secretariat, DWLBC is preferred).

If minor works are required that modify existing indigenous vegetation on roadsides, the site should be rehabilitated by the construction authority, if possible, at least to the standard it was before works commenced.

Any funds required to rehabilitate the site or to implement conservation practices must be included as part of the overall cost of delivering the service, and should be separately identified in the budget or tender document.

When works have an impact on adjacent land the owner should be advised by the service authority prior to commencement.

Any works conducted by, or under contract for, any service authority will follow the Policies and Guidelines outlined in this RVMP for the duration of the contract.

Council will seek resolution of conflicts resulting from the location of service provider assets or tree clearing practices and the protection of remnant vegetation.

Council will look for opportunities to co-ordinate work activities related to vegetation removal by the Council and the service provider to minimise impact to vegetation.

Council will adopt the principles of minimum disturbance as a basis for negotiations about planned vegetation removal to maintain prescribed zones around powerlines.

Any vegetation that must be removed to maintain prescribed zones will be done so according to the Policies and Guidelines in this RVMP.

Existing or regenerating indigenous vegetation which at maturity will not grow taller than 4 metres or intrude into legally defined EDPTI clearance zones, will be retained on the roadside.

Any works carried out by, or under contract for EDPTI, will follow the Policies and Guidelines outlined in this RVMP for the duration of the contract.

The service authority must ensure that appropriate staff involved in installing services or maintaining services will be instructed in vegetation management and rehabilitation techniques.

Where native vegetation is to be cleared as part of service delivery, the service authority should contribute to revegetation works at an appropriate, nearby site, to offset the effects of the clearance.
3.6 **Pest Plant and Pest Animal Control**

**POLICY: 8**

*The removal or control of pest plants and animals will be in accordance with the RVMP and accompanying guidelines.*

**Pest Plants**

A weed or pest plant is an unwanted non-indigenous plant that may compete with other plants for water, nutrients and light. Weeds are a major threat to the continued protection and enhancement of remnant vegetation on roadsides.

It is becoming increasingly obvious that the introduction of new weeds can often be traced to the movement of machinery from infested to clean areas. Wash down procedures for fine seed weeds like grasses and Monadenia are a crucial step to avoid the proliferation of pest plants in the district. Slashers in particular can be very effective weed distributing machines.

Considerations should also be given to the timing of machinery operations to minimise the risk of weed spread, i.e:

- slash before seed set;
- operate during wet or damp conditions.

The spread of weeds along roadsides is enhanced by the linear nature and is aided by machinery and vehicles, the movement of water in drains, the movement and dumping of soil and the grading of shoulders. Continual disturbance of roadsides by indiscriminate burning, clearing, grazing, ploughing of firebreaks and weed control, create conditions favouring weed invasion.

All authorities have a responsibility to help prevent the further spread of weeds along roadsides. Given very limited resources and the enormity of the problem it is vital that a weed control program be developed and implemented jointly by all those undertaking works on roadsides. The community has an important role to play in the control of weeds and must be included in the development and implementation of any program.

Under provision of the *Natural Resources Management Act (2004)*, AMLR NRM Board is responsible for the control of Proclaimed Plants on roadsides however, where the board incurs expense in controlling proclaimed plants on road reserves the owner of the land adjoining the road reserve shall be liable for costs. To avoid incurring costs landholders can control roadside weeds adjacent to their property.

If landholders intend to control declared plants near or amongst native roadside vegetation permission must be sought from the NRM Board who act on behalf of The District Council of Yankalilla and The City Of Victor Harbor to determine appropriate control methods. The landholder must accept full responsibility for and must ensure that any weed control activity including the use of chemicals and / or spraying does not interfere with or cause damage to the road reserve, other roadside vegetation or in any way effect the property of any other person.
Weed control by ploughing, cultivation or broad acre herbicide use is prohibited on all roadsides, except in exceptional circumstances and with written council approval.

Formal NVC approval for vegetation clearance will be required in all cases where proposed native vegetation clearance is not minor (as defined in RVMP), is in excess of the NVC guidelines (see below), where damage to rare or threatened species may occur, or where there is the potential for high off-target damage to native vegetation.

**Pest Animals**

Pest animals or vermin can include birds or mammals that are considered a pest to agriculture and declared under the Animal & Plant Control (Agricultural Protection and Other Purposes) Act 1986. The main animal pests for the Southern Fleurieu Peninsula are rabbits and foxes.

Rabbits are of particular concern to the conservation of remnant vegetation roadsides. Rabbits like to feed on young tender seedlings, and many regenerating plants provide the perfect fodder. The impact of rabbits on the ability of a vegetation community to regenerate and to maintain species diversity is unknown, but is likely to be significant.

Specific plans to control rabbits need to be developed in cooperation with landholders and the Animal & Plant Control Board.

Formal NVC approval for vegetation clearance will be required when high-impact vegetation control measures are necessary, rare or threatened species are present or clearance in excess of that detailed in the endorsed RVMP are proposed.

The Native Vegetation Council Guidelines *Clearance of Native Vegetation Associated with the Control of Plant and Animal Pests* (NVC 2006, below) provides information on minimising impacts to native vegetation during pest plant and animal control activities.
NVC Guidelines - Clearance of Native Vegetation associated with the Control of Plant and Animal Pests

INTRODUCTION

The Natural Resource Management (NRM) Act 2004 sets the framework for control of proclaimed animals and plants in South Australia and places an obligation on landholders to undertake pest control programs.

The Native Vegetation Act 1991 similarly sets a framework for conservation of native vegetation such that, in general terms, the clearance of native vegetation requires the consent of a State committee, the Native Vegetation Council.

The methods used for proclaimed plant and animal control should always be in accordance with advice from the local NRM Authorised Officer and NRM Board, in line with policies established by the NRM Council. In general it should be possible to avoid damage to native vegetation and it should be noted that the minimisation of such damage is a requirement of the Natural Resources Management Act 2004, Section 192.

However, in some situations a problem will not be controllable without at least some damage to native vegetation. In the past, such damage or clearance often required a consent under the Native Vegetation Act 1991.

To provide more streamlined process for pest control in areas of native vegetation, the regulations under the Native Vegetation Act have been amended to provide for clearance of native vegetation where this is necessary for pest control AND complies with guidelines issued by the native Vegetation Council. These guidelines have been prepared for that purpose.

It must be noted that the implementation of these guidelines requires some knowledge of native vegetation, particularly if a non-target approach is to be adopted in the control of proclaimed animals and plants. Removal of native plants in ignorance of their status is not acceptable. If there is any doubt about the identity of plants in this situation, a second opinion should be obtained from someone familiar with native vegetation (eg. Local council Natural Resource Officer from the Department of Environment and Heritage (DENR) Officer OR an officer from the Department of Water Land and Biodiversity Conservation (DWLBC), Native Vegetation Group or Native Vegetation Council Secretariat [see contact details below])

GUIDELINES

1. Clearance of Native Vegetation

The clearance of native vegetation during programs for control of proclaimed animals and plants should be avoided or minimised (in accordance with advice from the local NRM Authorised Officer or NRM Board) and must be in accordance with these guidelines.

2. Pruning of Native Vegetation
The pruning of native vegetation, if essential to provide access for pest animal and plant control, is acceptable provided that it is kept to a minimum and does not result in the death of the plant(s) involved.

3. Weed Control in Native Roadside Vegetation

**Proclaimed Plant control** by landholders, contractors or others in Category 1 or Category 2 vegetation (ie sites marked with blue vegetation markers) must be conducted by **bush for life or minimal disturbance** methods only. See Section 7.2, page 161, in ‘Complementary Programs’ Part of the RVMP for details of the roadside vegetation marker scheme.

**Spraying of proclaimed plants in native vegetation** on Category 3, 4 and 5 roadsides is acceptable provided that a careful and selective approach is used (eg spot-spraying) and damage to nearby native vegetation is avoided. The cover spraying of large shrubs (eg boxthorn) within areas of intact native vegetation should be avoided due to the high risk of off-target damage. Other, **lower risk methods, such as cut and swab or drill and inject**, should be considered. The use of herbicides must be in strict accordance with APC advice and with instructions for use provided by the manufacturer.

**Any broader spraying** program in native vegetation (eg boom-spraying) requires the endorsement of the District Council the Native Vegetation Group or Native Vegetation Council Secretariat, DWLBC, and may require the consent of the Native Vegetation Council through a clearance application.

4. Removal of Entire Native Plants

The removal of entire native plants (if considered essential to facilitate animal and plant control) must be discussed with and endorsed by the Native Vegetation Group or Native Vegetation Council Secretariat, DWLBC.

This consultation can take one of two main forms:

(a) **Case-by-case consultation**

Minor clearance of native species known to be common in a district may be resolved through verbal or electronic communication without the need for site assessment by DWLBC staff. For larger scale clearance, or for cases where the identity of the native plants is unclear, a site inspection will usually be undertaken.

**NOTES:**

1. In this situation, either the landholder undertaking the work or the authorised NRM officer (the authorised officer) should initiate the consultation by contacting the Native Vegetation Council Secretariat.

2. Whether a proposed clearance is “minor” (and therefore not warranting a site inspection) will be determined through discussion between the DWLBC officer and the landholder / authorised officer. As a guide, the clearance of up to 10 kangaroo thorn (Acacia paradoxa) for rabbit or boxthorn control could be regarded as “minor”.

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3. Where minor clearance is agreed without a DWLBC inspection, it will be recorded on the appropriate DWLBC file. Where an inspection is undertaken, the landholder / authorised officer is to be advised of DWLBC endorsement in writing.

4. If, as a result of the above consultation, the Native Vegetation Group or Native Vegetation Council Secretariat determines that a clearance proposal is of particular environmental significance or sensitivity, the proposal is to be referred as a clearance application to the Native Vegetation Council for decision. This may occur, for example, where a substantial area of native vegetation is involved, or where the clearance involves plant species of particular conservation significance.

(b) **Consultation based upon a broader planning approach**

Broader planning arrangements may be developed between NRM Boards/Authorised Officers and DWLBC.

For example, it may be agreed that certain methods will be applied within a NRM board district for control of pests often associated with particular native species – such as boxthorn or rabbits associated with *Acacia paradoxa*, or rabbits associated with Banksia-heath vegetation. This would be in the form of a management plan initiated by the local NRM Board and prepared in consultation with the Native Vegetation Council Secretariat. Once endorsed by the Native Vegetation Council Secretariat, the plan could be put into effect and the need for consultation with the Secretariat about each program would be avoided.

It is envisaged that plans of this type would normally be prepared on an NRM Board basis. However, there may be issues and management approaches of State-wide relevance, in which a State-wide management plan could be prepared, presumably at the initiation of the NRM Council.

**The control of proclaimed animals and plants in native vegetation should also take the following factors into account:**

- **the removal of tree saplings or more mature trees** is not normally necessary for pest control.

- **very localised pest control issues** might be manageable with hand-held equipment rather than heavier machinery which could have greater environmental impact.

- **the driving of a vehicle** in intact native vegetation will cause damage and therefore is to be avoided (equipment should be carried in).

- there is an increasing range of **pest control equipment** available, some of which has less environmental impact than the equipment used more traditionally.

- any control method involving **soil disturbance** has the potential to promote further establishment of proclaimed plants or other introduced plants which may disrupt the ecology of the native vegetation: Soil disturbance must be minimised and **control works should be followed** with site monitoring and selective eradication of any introduced plants which re-establish.
• **fire has some potential for inclusion** in pest control programs in native vegetation to improve access, reduce the bulk of proclaimed plants, and possibly to promote the regeneration of native species: however, the issues associated with fire can be complex and any such burning in native vegetation **must be discussed with DWLBC**.

3.6.1 NVC Guidelines

Where roadsides have been disturbed or substantially modified, exotic pasture grasses and small herbaceous perennial or annual weeds become the dominant vegetation type. In accordance with the District Bushfire Prevention Plan, many of these areas are slashed on a regular basis. The floristic composition of the site and the season should determine the best time to slash these areas. Programs should be timed to control particularly invasive grasses such as Phalaris (*Phalaris sp.*) and to enhance the growth of indigenous species. Slashing time is often limited in the district due to the short season between when the ground is dry enough to slash and before bushfire restrictions apply. Where any damage or removal of native vegetation will be associated with exotic pasture grass control, Native Vegetation Council approval/assessment will be sought.

3.6.2 Exotic Pasture Grasses

Proclaimed weeds are considered to be a serious threat to agriculture, the environment, and the safety of the public, and declared under the Animal & Plant Control (Agricultural Protection and Other Purposes) Act 1986. However not all weeds on roadsides are agricultural proclaimed pest plants.
Table 3.1. Proclaimed Weeds in the Fleurieu APC Board Area

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lycium ferocissimum</td>
<td>African boxthorn</td>
</tr>
<tr>
<td>Pennisetum macrourum</td>
<td>African feathergrass</td>
</tr>
<tr>
<td>Eragrostis curvula (excluding the cultivar &quot;Consol&quot;); curvula (excluding the cultivar &quot;Consul&quot;)</td>
<td>African lovegrass</td>
</tr>
<tr>
<td>Malvella leprosa</td>
<td>Alkali sida</td>
</tr>
<tr>
<td>Alternanthera philoxerooides</td>
<td>Alligator weed</td>
</tr>
<tr>
<td>Xanthium spinosum</td>
<td>Bathurst burr</td>
</tr>
<tr>
<td>Bifora testiculata</td>
<td>Bifora</td>
</tr>
<tr>
<td>Rubus fruticosus sp. Agg.</td>
<td>Blackberry</td>
</tr>
<tr>
<td>Silene vulgaris</td>
<td>Bladder campion</td>
</tr>
<tr>
<td>Chrysanthemoides monilifera</td>
<td>Boneseed</td>
</tr>
<tr>
<td>Asparagus asparagoides and</td>
<td>Bridal creeper</td>
</tr>
<tr>
<td>Asparagus declinatus</td>
<td></td>
</tr>
<tr>
<td>Hirschfelia incana</td>
<td>Buchan weed</td>
</tr>
<tr>
<td>Watsonia meriana var. bulillifera</td>
<td>Bulbil watsonia</td>
</tr>
<tr>
<td>Tribulus terrestris</td>
<td>Caltrop</td>
</tr>
<tr>
<td>Genista monspessulana</td>
<td>Cape broom</td>
</tr>
<tr>
<td>Daucus carota</td>
<td>Carrot</td>
</tr>
<tr>
<td>Nasella neesiana</td>
<td>Chilean needlegrass</td>
</tr>
<tr>
<td>Lantana camara</td>
<td>Common lantana</td>
</tr>
<tr>
<td>Hyparrhenia Hirta</td>
<td>Coolatai Grass</td>
</tr>
<tr>
<td>Acreptilon repens</td>
<td>Creeping knapweed</td>
</tr>
<tr>
<td>Reseda lutea</td>
<td>Culleaf mignonette</td>
</tr>
<tr>
<td>Rosa canina</td>
<td>Dog rose</td>
</tr>
<tr>
<td>Cytisus scoparius</td>
<td>English/scotch broom</td>
</tr>
<tr>
<td>Euphorbia terracina</td>
<td>False caper</td>
</tr>
<tr>
<td>Convolvulus arvensis</td>
<td>Field bindweed</td>
</tr>
<tr>
<td>Allium vineale</td>
<td>Field garlic</td>
</tr>
<tr>
<td>Ulex europaeus</td>
<td>Gorse/Furze</td>
</tr>
<tr>
<td>Cardaria draba</td>
<td>Hoary cress</td>
</tr>
<tr>
<td>Marrubium vulgare</td>
<td>Horehound</td>
</tr>
<tr>
<td>Chenchus incertus and C.longispinus; Incertus and C.longispinus</td>
<td>Innocent weed</td>
</tr>
<tr>
<td>Alternanthera pungens</td>
<td>Khaki weed</td>
</tr>
<tr>
<td>Diplotaxis tenuifolia</td>
<td>Lincoln weed</td>
</tr>
<tr>
<td>Crataegus momgyna</td>
<td>May</td>
</tr>
<tr>
<td>Myagrum perfoliatum</td>
<td>Muskweed</td>
</tr>
<tr>
<td>Xanthium strumarium sp.agg.</td>
<td>Noogoora burr complex</td>
</tr>
<tr>
<td>Cyperus rotundus</td>
<td>Nutgrass</td>
</tr>
<tr>
<td>Olea europaea (excluding cultivated trees)</td>
<td>Olive</td>
</tr>
<tr>
<td>Moraea flaccida</td>
<td>One-leaf Cape tulip</td>
</tr>
<tr>
<td>Adonis microcarpa</td>
<td>Pheasant's eye</td>
</tr>
<tr>
<td>Toxicodendron radicans</td>
<td>Poison ivy</td>
</tr>
<tr>
<td>Acacia nicotica subsp.indica</td>
<td>Prickly acacia</td>
</tr>
<tr>
<td>Opuntia spp.except O.ficusindica</td>
<td>Prickly pear</td>
</tr>
<tr>
<td>Ludwigia peruviana</td>
<td>Primrose willow</td>
</tr>
<tr>
<td>Toxicodendron succedaneum</td>
<td>Rhus tree</td>
</tr>
<tr>
<td>Echium plantagineum</td>
<td>Salvation jane</td>
</tr>
<tr>
<td>Solanum elaeagnifolium</td>
<td>Silverleaf nightshade</td>
</tr>
<tr>
<td>Chondrilla juncea</td>
<td>Skeleton weed</td>
</tr>
<tr>
<td>Carduus tenuiflorus</td>
<td>Slender thistle</td>
</tr>
<tr>
<td>Picnomon acarna</td>
<td>Soldier thistle</td>
</tr>
<tr>
<td>Solanum elaeagnifolium</td>
<td>Soursob</td>
</tr>
<tr>
<td>Cirsium vulgarare</td>
<td>Spear thistle</td>
</tr>
<tr>
<td>Rosa rubiginosa</td>
<td>Sweet briar</td>
</tr>
<tr>
<td>Nassella leucotricha</td>
<td>Texas needlegrass</td>
</tr>
<tr>
<td>Emex australis</td>
<td>Three corner jack</td>
</tr>
<tr>
<td>Allium triquetrum</td>
<td>Three corner garlic</td>
</tr>
</tbody>
</table>
Other invasive weeds of roadsides are listed as Environmental or Community Pest Plants.

3.6.3 Environmental Weeds / Community Pest Plants

POLICY: 9

Council will meet its obligations under the Natural Resources Management Act 2004. Council will allocate funds to control environmental weeds on Category 1 and 2 roadsides, in consultation with the AMLR NRM Board.

Environmental weeds are plants that colonise local indigenous vegetation. They can be exotic, or Australian natives not local to an area. They are so termed because their presence is in some manner detrimental to the natural environment. Environmental weeds such as Radiata Pine *Pinus radiata* or Olive can be a serious threat to remnant vegetation, and can add significantly to fire hazard and fuel loads.

Examples of environmental weeds that are also Proclaimed Pest Plants are:

<table>
<thead>
<tr>
<th>Bone</th>
<th>Cape Broom</th>
<th>Coolatai Grass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridal Creeper</td>
<td>English Broom</td>
<td>African Love Grass</td>
</tr>
<tr>
<td>Bridal veil</td>
<td>Olive</td>
<td>Chilean Needle Grass</td>
</tr>
<tr>
<td>Briar Rose</td>
<td>Gorse</td>
<td></td>
</tr>
<tr>
<td>Blackberry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GUIDELINES

MINIMAL disturbance techniques will be used when controlling environmental weeds.

Council will undertake a program on selected roadsides, for the progressive replacement of exotic grasses with indigenous species.

In accordance with the District Bushfire Prevention Plan exotic pasture grasses on roadsides will be slashed on an annual basis.

The relevant officer must be consulted prior to any control of exotic grasses on Category 1 or 2 roadsides. Slashing of indigenous understorey must be avoided unless (a) specified in the District Bushfire Prevention Plan and (b) approved by the Native Vegetation Council. Consultation with the Native Vegetation Council Secretariat is nessesary for clearance of native vegetation associated with slashing exotic grasses on Category 3 and 4 roadsides.

Areas of regenerating indigenous vegetation will be identified on the ground before, and avoided during slashing operations. Small mowing equipment should be used to prevent damage to remnant vegetation.
On identified **Category 3 roadsides** slashing to control exotic grasses should be carried out at a time specified by the Operations Manager or representative.

The Native Vegetation Council will be consulted regarding any **slashing of regenerating, indigenous understorey vegetation**. Areas of regenerating indigenous vegetation will be avoided during slashing operations unless this conflicts with the District Bushfire Prevention Plan. (See Section Bushfire Prevention)

**On Category 1, 2 and 3 roadsides** in areas of exotic grass, blades on machines should be set accordingly to CFS recommendations, approximately 100mm above ground level.

**Mowing of verges on Category 4 and 5** roads may be as low as required with care taken to avoid individual or groups of native plants.

**Weed control by ploughing, cultivation or broad acre herbicide** use, except in exceptional circumstances approved by Council, is prohibited on all roadsides.

**Weed control programs** should be jointly undertaken where possible with adjacent landholders.

**Control of environmental weeds** on all roadsides will be based on minimum disturbance techniques.

**Control of environmental weeds** on roadsides, will be linked with programs to re-establish indigenous vegetation, supplemented either by natural regeneration and /or planned revegetation.

The CVH and DCY and other authorities **will not use plants known to be environmental weeds** in any landscape project.

**All environmental weeds** will be **disposed of** at a designated landfill, burnt on site, or deposited on roadside clearings (only if vegetation does not contain seeds or other material that may self propagate).

**Woody weeds** should not be removed when they are **in seed** unless there is no alternative.

Where shrub weeds must be removed when they are in seed, they will be transported to a designated dump site for disposal and covered to prevent weed seeds blowing onto the roadside and colonizing further areas or burnt on site under controlled conditions.

**It is an offence** to move a proclaimed plant along a roadway (Animal & Plant Control Act 1986) without a permit from the AMLR NRM Board.

Councils should **implement an education program** on environmental weeds based on similar initiatives developed by other agencies and local government areas.

**Work zones are identified to isolate high conservation areas**, where more rigorous hygiene measures would be necessary.

**Council** should undertake to train field **staff to recognise environmental weeds**.
3.6.4 Mistletoe

**POLICY: 10**

When Council is satisfied that a patch of roadside vegetation is seriously affected by an imbalance of box mistletoe (*Amyema miquelii*) and likely to jeopardise the long term health of the remnant vegetation, and where no other alternative exists, Council will consider trial areas or pilot programs for the removal of box mistletoe or the pruning of affected limbs, in consultation with the Native Vegetation Council.

Mistletoe is the name given to many local indigenous species of semi-parasitic, epiphytic plants. It is hosted by a range of native trees and shrubs and is often erroneously regarded as a pest plant. The native species of Mistletoe perform a vital link in complex ecosystems. In some disturbed areas the perceived infestation of mistletoe plants can appear to be out of balance with their hosts. The factors involved in these infestations appear to be linked with the extent of general vegetation clearance.

Note that the exemption from the Native Vegetation Act relating to mistletoe removal is only applicable to the box mistletoe (*Amyema miquelii*), and not all species of mistletoe. The removal of box mistletoe (*Amyema miquelii*) is exempt under the Native Vegetation Act 991 (Regulation 5(1)(zj)) provided that there is compliance with NVC guidelines. Refer to the ‘Guidelines – clearance of box mistletoe’, which can be found in the attached Native Vegetation Council Guidelines (Appendix 2). (Note that the guidelines include photos, which may be useful in determining when mistletoe is to be removed). Removal of all other species of mistletoe requires the consent of the Native Vegetation Council.

3.6.5 Woody Weed Control

The control of woody weeds is significant to the maintenance of native plant communities on roadsides.

The District Council of Yankalilla and the City of Victor Harbor have an annual budget for the removal of roadside weeds including;

- Olive
- Tagasaste
- Boneseed
- Sweet Pittosporum
- Cottoneaster
- Gorse
- Broom Bush
- Acacia saligna
- Pines
- Coastal Tee Tree
- Coastal Wattle (*Acacia longifolia var.longifolia*)
- Watsonia
- Dog Rose
- African Grasses
- Asparagus weeds
- Ash Trees
- Albizia
- Blackberry
- Buckthorn
GUIDELINES

The **pruning of vegetation** to maintain sight distance and for woody weed control can generate large quantities of biomass that **must be removed** from road surfaces.

**Lopped native vegetation** often contains **valuable seed sources** and should be utilized. Remaining material should be mulched and used in nearby revegetation or landscape projects or alternatively spread on nearby Category 5 or 6 roadsides to encourage the establishment of local native plant communities from seed contained in the mulch.

**When removing woody weeds** staff or contractors must be alert and meticulous in order to:

- Avoid **mechanical damage** to surrounding native vegetation;
- Avoid the **smothering** of native vegetation;
- Avoid **overspray** onto native vegetation;
- Avoid **chemical spillage or off target damage** whilst treating woody weed stems and stumps;
- Avoid the **spread of seed or propagative vegetation**;
- Avoid the **spread of plant diseases** like Phytophthora and Mundulla Yellows.
3.7 **Plant Dieback**

An awareness and understanding of plant diseases/ dieback syndromes such as Phytophthora and Mundulla Yellows is a requirement for planning and implementation of activities within road reserves.

Phytophthora is known to occur in several locations within The District Council of Yankalilla and the City of Victor Harbor. Modelling indicates further potential to spread throughout the district due to climatic, vegetation, land use and population factors. The disease is a serious threat to native vegetation on roadsides. Roadsides also present a very high risk of vectoring Phytophthora.


Mundulla Yellows is a progressive dieback syndrome seen in *Eucalyptus* and other native species and is known to occur within the district boundaries of the Southern Fleurieu RVMP, in and around Victor Harbor and along the Noarlunga - Cape Jervis road. Mundulla Yellows is now thought to be caused by environmental conditions (rather than an organism as previously surmised), in particular an increase in alkalinity and salinity. Mundulla Yellows has been strongly associated with roadside vegetation and poses a huge threat to the conservation and protection of remnant roadside vegetation as recovery of scattered trees is unlikely.

Council’s strategy for managing Mundulla Yellows is in accordance with the most current information and best practice available. The most recent available data can be found at [http://www.environment.sa.gov.au/biodiversity/plants-animals/dieback.html](http://www.environment.sa.gov.au/biodiversity/plants-animals/dieback.html) and in the attached research papers (Appendix 3).
3.8 Clearing for Fence Lines

POLICY: 11

Council will comply with the fenceline clearance standards of Native Vegetation Act 1991 and the guidelines for the management of roadside vegetation (July 1997) as issued by the Native Vegetation Council.

Fenceline clearance of vegetation within roadsides by adjacent landowners requires Council approval under the Local Government Act 1999 (Section 221).

Clearance approval is required for any vegetation clearance along fence-lines which exceeds the following standards.
Consultation with the Native Vegetation Conservation Section should occur through the local council.

NVC Fence-line clearance standards

Where the Roadside vegetation consists largely of trees, only branches protruding through or overhanging the fence, or trees growing on the actual fence alignment, should be removed.

Where shrubs or bushes are growing through the fence line, those plants growing within one metre of the fence alignment can be removed.

These standards take into account that the adjoining landholder can usually clear up to five metres width on the private land abutting the road, thus allowing vehicular access to the fence.

Low impact methods of clearance (e.g. minimal ground disturbance and minimal impact pruning) should be used.

Consultation and Approval Requirements

Landholders should be encouraged to locate new fencing three to five metres into their properties so as to conserve roadside vegetation and reduce construction costs.

Formal NVC approval for vegetation clearance will be required when proposed clearance exceeds minimum guidelines or when rare or threatened species (NPW Act Schedules or EPBC Act 1999) are present.

The clearance of indigenous vegetation for the erection and maintenance of boundary fences abutting road reserves must be in accordance with the guidelines issued by the Native Vegetation Council.

Notify landholders of the obligations under the Local Government Act and the Native Vegetation Act with respect to clearance / maintenance or construction of fences.

Negotiate with landholders abutting category 1 or 2 roads to employ minimal disturbance techniques when maintaining or constructing fences.
As applicable, seek approval from the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

GUIDELINES

Advise landholders of their obligation to seek permission from Council for vegetation clearance on the road reserve, associated with installation and maintenance of boundary fences.

Promote the establishment of buffer zones on private lands adjacent to Category 1 and 2 roadside vegetation.

Pursue opportunities to negotiate changes in fencing alignment in order to retain significant plant species where possible.

Promote clearance and maintenance strategies that will minimise environmental impacts on roadside vegetation.
3.9 Property Access

POLICY: 12

Council will comply with the property access standards of the Native Vegetation Act 1991 and the guidelines for the management of roadside vegetation (July 1997) as issued by the Native Vegetation Council.

Clearance of roadside vegetation may be required to provide access or improve access to private properties (eg. new driveways). In addition to obligations under the Native Vegetation Act 1991 clearance for this purpose requires development approval from Council and also DTEI on arterial roads.

For rural areas, a primary producer may need new access to a paddock, possibly to cater for wide farm machinery. In other situations (eg. Semi-urban or rural living) it may be normal vehicular access to a residential allotment.

In these situations, the safety of the access user needs to be the primary consideration. At the same time the conservation of native vegetation also needs to be considered. If there is more than one option which will provide safe access, the option which involves least disturbance to native vegetation should be selected.

Where some clearance of native vegetation is unavoidable, this should not exceed the following standards:

- For normal vehicle access - five metres wide plus minimum clearance along the road reserve needed to provide adequate sight distance:

- For wider farm vehicles - ten metres wide plus minimum clearance along the road reserve needed to provide adequate sight distance.

- Standards for adequate sight distance for different situations can be found in “Guide to Traffic Engineering Practice” Part 5: Intersections at Grade, published by Austroads. Further information is also available by contacting Noel O’Callaghan at the Department for Transport, Energy and Infrastructure on 8343 2439.

Above clearance standards in areas where remnancy is low and roadsides are narrow may be regarded as a significant impact, alternatives should be investigated thoroughly with all interested stakeholders. In identifying the location of ‘cleared’ areas, recognition of native grasslands must be considered.

Formal NVC approval for vegetation clearance will be required when proposed clearance exceeds the above standards as described in the NVC Guidelines for the management of roadside vegetation (July 1997).
3.10 Bushfire Hazard Reduction

POLICY: 13

Council when developing and reviewing Regional and Local Bushfire Prevention plans will adopt the provisions of the Roadside Vegetation Management Plan and accompanying guidelines.

POLICY: 14

Council policy on roadside vegetation management for bushfire suppression is to reduce biomass of non native vegetation in areas identified in the District Bushfire Prevention Plan.

Roads and roadsides play an important role in bushfire prevention in rural areas. Road managing authorities are charged with the dual responsibility of managing roads for bushfire prevention under the *Fire and Emergency Services Act (2005)* and for the conservation of flora and fauna under the *Native Vegetation Act (1991)*. Achieving both these goals can be difficult and requires careful planning, a thorough evaluation of all the issues involved, and a reasoned approach to decision making.

Section 105G, of the *Fire and Emergency Services Act 2005* requires that:

```
(1) A council that has the care, control or management of land—
(a) in the country; or
(b) in a designated urban bushfire risk area,
must take reasonable steps—
(c) to prevent or inhibit the outbreak of fire on the land; and
(d) to prevent or inhibit the spread of fire through the land; and
(e) to protect property on the land from fire; and
(f) to minimise the threat to human life from a fire on the land”.
```

The City of Victor Harbor and the District Council of Yankalilla’s District Bushfire Prevention Plans indicate that roads of strategic importance in relation to fire prevention/control are targeted with intensive reduction programs, such as annual slashing. However as this is not economically or environmentally practical or desirable for many roadsides, alternative methods of hazard reduction for roadsides of less strategic importance should be considered. Revegetation with native vegetation can provide a suitable alternative in some areas.

The City of Victor Harbor and the District Council of Yankalilla annual slashing program is restricted to roadsides where no native vegetation is present.

When undertaking any roadside activities careful consideration should be given to the potential for increased bushfire risk, associated with an increase in weeds that are likely to replace native vegetation if disturbed or modified.

The above Council policy on the construction and location of fuel breaks has resulted from the development of the District Bushfire Prevention Plan which encourages the retention of and minimises the impact on areas of intact roadside vegetation.

Where a well-vegetated road reserve adjoins cleared farmland, any required fuel-break should be established on the cleared land rather than through clearance of roadside vegetation.
the roadside should be the minimum needed to provide reasonable protection for the fence. Approval is not required for the maintenance of existing fuel breaks up to 5 metres wide.

With the focus on fire prevention measures for areas dominated by introduced species the damage to native vegetation will be minimised or avoided in roadside fire prevention.

The Southern Fleurieu Councils should prioritise weed control work to provide multiple benefits where possible, for example remove weed infestations to protect valuable native vegetation whilst also reducing the fire risk of an area.

Where native vegetation is identified as a bushfire hazard, the following dot points (summarised in Table 4.5) outline the approval requirements for the clearance of native vegetation:

- No approval is required for clearing a 5m wide fire break on a roadside if it was legally established in the previous year, or if no native vegetation is present.
- Internal approval (by local council District Bushfire Prevention Officer or Regional Prevention Officer of the CFS) is required for clearing a legally established fire break if it was cleared prior to the previous year but before 5 years, and natural regeneration may have occurred since. Such firebreaks are to be reviewed prior to clearance to see if they are in the appropriate location and ensure the appropriate methodology (rolling, slashing), or whether the fuel break should be located on adjacent cleared land, or whether the clearance width can be reduced.
- New breaks with a maximum of 20 m long across roadside, and not less than 500m apart, on previously cleared or areas without native vegetation such as gateways, may also be approved internally, without the need to seek formal NVC approval.
- Formal NVC approval for vegetation clearance will be required when any new fuel reduction works involve clearance of roadside native vegetation, unless in accordance with a District Bushfire Management Plan under the Fire and Emergency Services Act 2005, or through an application to the CFS Regional Prevention Officer under Native Vegetation Regulation 5(1)(a) (see www.cfs.sa.gov.au ‘New Rules on Native Vegetation Management’).

GUIDELINES

In accordance with the Native Vegetation Act 1991, all plans for works on roadsides not exempt under the Act will be supplied to the responsible authority and referred to the Native Vegetation Council, as soon as the information is available, preferably in advance of works being undertaken.

Required fuel reduction on roadsides will be achieved, as far as possible, through the management of exotic vegetation.

Hazard reduction works to be undertaken on roadsides will be in strict accordance with minimum disturbance techniques eg no ploughing or grading.

Any landholder wishing to undertake bushfire prevention works on roadsides must seek prior approval from the Operations Manager, District Bushfire Prevention Officer and the Natural Resources Officer. Works will be carried out in accordance with the District Bushfire Prevention Plan.

The District Bushfire Prevention Plan will include the conservation category of roadsides designated as strategic or tactical firebreaks.
Current bushfire prevention works outlined in the District Bushfire Prevention Plan should be evaluated to ensure that works are being undertaken in a manner that allows for optimum protection and enhancement of indigenous vegetation.

As more information becomes available on flora and fauna management the District Bushfire Prevention Plan should be updated accordingly.

All rare, threatened and significant flora and fauna existing on roadsides designated as strategic or tactical firebreaks will be recorded in the District Bushfire Prevention Plan and clearly identified and protected on ground by the responsible authority prior to any works being carried out.

All bushfire prevention works on Category 1 and Category 2 roadsides will be monitored and evaluated on an annual basis preferably in consultation with a fire ecologist and officer of DENR.

All works must be shown to meet the objectives of the District Bushfire Prevention Plan and the Native Vegetation Act 1991.

Wherever possible, strategic and tactical firebreaks should be constructed on private land of low conservation value or on known Category 4 or 5 roadsides.

Where the roadside and the adjoining land are both of high conservation value or no alternative exists but to locate the firebreak on the roadside it will be constructed in such a way that minimises damage to native vegetation.

On Category 1, 2 and 3 roadsides where flora and fauna are threatened by fuel reduction works, all works will be undertaken in such a way that has the least impact to flora and fauna.

Where fuel reduction is needed on Category 1, 2 or 3 roadsides, it should be achieved through selective control of any exotic species present. Where this will not achieve the desired fuel reduction, prescribed management options will be determined from a site-specific assessment in cooperation with the Bushfire Prevention Officer, Natural Resources Officer and the Native Vegetation Council.

Fuel reduction on Category 3 roadsides should be maintained by slashing or mowing of sections of exotic vegetation, carried out at a time specified by the Operations Manager or representative, in accordance with the District Bushfire Prevention Plan. Areas of regenerating indigenous vegetation will be avoided during slashing operations unless this conflicts with the District Bushfire Prevention Plan and is also in accordance with Native Vegetation Council guidelines.

Slashing operations should be implemented:

- At a time that retards the growth of exotic grasses and prevents seed set.
- To enhance the growth of indigenous understorey species and allow seed set
- With consideration to conserve rare plants if present. Areas of regenerating indigenous vegetation will be clearly identified on ground by the Natural Resources Officer before slashing operations commence so that they can be avoided while works are in progress.

Indigenous understorey should not be slashed on an annual basis. Programs should be devised to combine slashing and burning to achieve both bushfire prevention and conservation objectives.
There are many alternatives available that should allow both bushfire prevention and conservation objectives to be achieved. DENR should be consulted for advice.

**On Category 1, 2, and 3 roadsides** in areas of exotic grass and weeds, blades on machines should be set according to CFS recommendations, approximately 100mm above ground level.

**The use of herbicides to maintain a firebreak is prohibited** except to control exotic grass and weed growth on Category 3, 4 & 5 roadsides and subject to the approval of the Operations Manager.

**Fuel reduction burning is not recommended** unless it can be demonstrated to favour a desirable species or community of vegetation and only with approval of the Native Vegetation Council.

The District Bushfire Prevention Committee liaise with the Officer responsible for Natural Resources to share advice on local flora and fauna.

Council undertakes an **education program** to provide the community with information about bushfire prevention issues.

**Landholders** are provided with information on how to reduce the fire risk around their properties without damaging flora and fauna values.

**Council monitors the spread of weeds** that may result from bushfire prevention works especially those weeds that spread into native vegetation.

Council encourages the Department of Environment and Heritage to provide increased time and funds to research the effects of burning regimes on native flora and fauna and weed species survival and distribution.
3.11 Grazing of Roadsides

POLICY: 15

Permission is required to graze any roadside. Grazing Category 1, Category 2 and Category 3 roadsides throughout the district is prohibited. Consultation with Native Vegetation Council Secretariat DENR must be undertaken prior to any final approval for grazing of roadsides to ensure compliance with the requirements of the Native Vegetation Act, 1991.

Livestock grazing on indigenous vegetation is not desirable. Their feeding action and hooves are likely to cause greater damage to vegetation than native animals. Grazing may eventually reduce the diversity of indigenous vegetation, and interfere with the process of natural regeneration. It may also aid in the spread of weeds by creating native plant and soil disturbance and the movement of weed seeds via animal droppings and body hair cause soil compaction and an alteration to soil nutrient status.

Roadsides cleared of native vegetation are also vulnerable to environmental degradation through grazing, specifically soil erosion, compaction and storm water contamination.

Grazing for the purpose of this policy is defined as holding livestock on the side of the road for the purpose of grazing.

GUIDELINES

Under the Native Vegetation Act 1991 and associated Guidelines for the Management of Roadside vegetation (July 1997), clearance approval is required from the Native Vegetation Council for any grazing (other than associated with droving), likely to cause damage to native roadside vegetation.

This includes roadsides where:
- Native shrub and understorey species are present; and
- There is evidence of recent or periodic regeneration of native plant species;

Grazing should only be permitted on Category 3, 4, or 5 roadsides to reduce exotic grass litter, where no native species are present. If native species are present, NVC approval must be sought.

Council should identify where grazing occurs on road reserves throughout the district. Advise all landowners that permission to graze stock on any roadside requires the permission of the District Council of Yankalilla or the City of Victor Harbor and the Native Vegetation Council.

Deliberate grazing of roadsides without approval is illegal.

The grazing of roadsides by adjoining land holders is not acceptable as a bushfire prevention strategy.
### 3.12 Movement of Stock on Roadsides

**POLICY: 16**

Where movement of stock occurs on roadsides containing native vegetation, give consideration to all strategies that will minimize the impact upon existing or regenerating indigenous vegetation. Where the movement of stock is permitted, advise landowners that stock must be kept moving and not held within the road reserve.

As introduced animals move through an area they can cause damage to remnant roadside vegetation and aid the spread of weeds and disease. They can also contribute to erosion, sedimentation and general soil degradation. In some circumstances it is necessary to allow access of local livestock from one property or paddock to another, as a part of daily farming operations.

Identify where the practice of moving livestock along road reserves of high value occurs (Category 1 & 2). Identify any alternative routes available for stock movement. Where this existing practice occurs along Category 1, 2, or 3 road reserves monitor impact on vegetation. Develop alternative actions (i.e. identify funding sources that may contribute to fencing costs) to protect valuable vegetation where appropriate.

As applicable, seek approval from the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999.

**GUIDELINES**

If the livestock owner can demonstrate that no alternative is available. The movement of livestock from one property or paddock to another as part of normal farm management may be permitted.

Where routes coincide with significant environmental areas (Category 1 & 2) the owner of the stock or land should be contacted, to take special care in order to prevent these areas being adversely affected.

In these instances, if possible, alternative routes along roads of lower conservation significance should be used.

Where there is an opportunity for indigenous vegetation to be disturbed, all possible alternative routes should be explored, and alternatives such as funding sources to help fence roadsides pursued.

Where routes pass through areas of significant vegetation (Category 1 and 2 Roads, Rare, Threatened or Significant Species, Strategic Wildlife Corridors, or other listed sites) an inspection will occur on an annual basis, to determine if damage to native vegetation has occurred. If so, the owner of the stock or land will be contacted to consider strategies to prevent the damage (e.g. fencing).
3.13 Recreational Use of Road Reserves

Recreational use of roadsides include legitimate uses like horse and walking trails and illegal use like trail bikes. The Heysen trail South Australia’s longest walking trail passes through both council districts and terminates at Cape Jervis. The trail uses made road reserve, unmade road reserve, private and public land.

Consultation and Approval Procedures (as outlined in the NVC 1997 Guidelines)
The development of any recreational trails along road reserves must include consultation with the local council and with the Native Vegetation Council Secretariat where the trail would pass through or immediately alongside native vegetation. Clearance approval is needed for any trail development involving clearance of native vegetation.

3.13.1 Horse Riding

POLICY: 17

Horse trails will not be established along Category 1 or 2 roadsides and only on Category 3 road verges in exceptional circumstances as approved by Council.

POLICY: 18

Horse trails will not be established along road verges that form part of a Strategic Wildlife Corridor or revegetation site, unless in exceptional circumstances as approved by Council.

Horse riding is an important part of our cultural and historic heritage and an important recreational activity.

Horse traffic on roadside verges, can be very damaging to remnant vegetation:
- vegetation can be trampled;
- soil can be disturbed creating opportunities for weed invasion; and
- weeds and disease contained in their hooves and manure can be spread.

GUIDELINES

Refer to the principles and practices in the 1997 NVC roadside guidelines that, provided they are adhered to, may allow horse trails to be acceptable

Strategies to minimise the impact of horse riding activities may include the following:
- signpost areas of special environmental significance to alert horse riders to take special care;
- fence around areas of special environmental significance on popular bridle paths;
- fence well-worn and popularly used bridle paths to prevent horses deviating from the track and damaging other areas;
permit riding only on specified trails and clearly signpost these areas - maximise opportunities to use areas that have already been disturbed;

prepare a leaflet to provide information to horse riders on designated horse riding trails and significant environmental areas along the way;

involve members of the horse-riding fraternity in Bush for Life workshops;

Category 3 roadides will only be used to link trails, which primarily exist in lower category vegetation.

Council should further develop and implement a district horse riding policy in consultation with relevant groups.

The Operations Manager or appropriate officer could initiate discussions with Pony Clubs and Trail Rides operating within the district to develop a horse riding policy to protect significant environmental areas along roadsides.

3.13.2 Unused Road Reserves

POLICY: 19

Roads identified for protection of remnant vegetation, wildlife habitat, and strategic environmental corridors or for their recreational or tourism opportunities will not be subject to disposal. (Council has identified and categorised unused road reserves to establish their current and future status in ‘Survey 40 and 41 Undeveloped Road Reserve Vegetation Survey, Peter D. Clark, March 2002’).

Unused road reserves can provide some of the best examples of remnant vegetation. Where these areas have potential as wildlife corridors or contain significant flora they should be retained as reserves whenever there is an opportunity to do so.

Council is the responsible authority for unused road reserves.

Modification of native vegetation on leased roads, by direct clearance or changed grazing practice, needs Native Vegetation Council approval.

Where important native vegetation is identified on leased roads, it should be protected through a management agreement or through removal of the area from the lease (NVC 1997 Guidelines).

Leasing of road reserves will be limited to areas known to support little or no native vegetation (‘Category 5’ roads). Leasing only to be permitted where roads have been surveyed.

GUIDELINES

Council should assess the conservation and recreational value of all unused road reserves located within the district.

The conservation and recreational value of unused roads should be determined prior to issuing a lease, selling the reserve or allowing a road to be developed.
Unleased, unused road reserves that are of high conservation value or of potential significance as a wildlife corridor not be made available for future lease or disposal.

Where unused road reserves are of high conservation value or of potential significance as a wildlife corridor the Council will work to have these areas recognised by DENR and measures devised to ensure they are protected or restored.

At expiry of current leases, unused road reserves that have been assessed as being of potential significance as a wildlife corridor, should not be renewed. Council will look at all possible options to convert these areas into conservation zones.

New roads will not be built on unused road reserves of high conservation value or of potential significance as a wildlife corridor unless there is no alternative.

When there is no alternative to build a new road on an unused road reserve of high conservation value or of potential significance as a wildlife corridor it should be built in such a way that minimises impact to flora and fauna values.

When there is no alternative but to sell an unused road reserve of high conservation value or of potential significance as an environmental corridor, a conservation covenant should be placed on the reserve prior to its sale.

Landholders already leasing unused road reserves of high conservation value or of potential significance as a wildlife corridor be encouraged with incentives and information from Council or DENR, to manage these areas so as to protect flora and fauna values. If these areas are not managed to the satisfaction of Council or DENR, the lease should be revoked.

When a leased unused road reserve has been degraded by current management practices, but has potential significance as a Strategic Wildlife Corridor, the landholder be encouraged to rehabilitate the area. All possible funding options should be considered.

When there is no alternative but to lease an unused road reserve that can provide a recreational link, the lease should provide for the appropriate type of access and management guidelines.

3.13.3 Trail Bikes and Off-Road Vehicles

POLICY: 20

The establishment of trails along roadsides for use by trail bikes or off-road vehicles is prohibited. Council will not endorse the use of unregistered vehicles on roadsides.

This section refers to all unauthorised traffic on roadsides including bicycles, mountain bikes, trikes and motorbikes, all terrain vehicles, go-carts and billy-carts etc.

Illegal use of trail bikes and off-road vehicles (including motorbikes) on roadside occurs throughout our region for a variety of reasons. Many of these vehicles are unregistered, and cause damage to roadside vegetation.

GUIDELINES
Any existing use of roadsides by unregistered and unauthorised traffic should be determined and reported.

Any new incursions along roadsides by unregistered and unauthorised traffic should be reported.

3.13.4 Walking and Bicycle Trails

POLICY: 21

Council undertake to identify and categorise unused road reserves to establish their current and future status. Those roads identified for protection of remnant vegetation, wildlife habitat, and strategic environmental corridors or for their recreational or tourism opportunities will not be subject to disposal.

The Southern Fleurieu Regional Recreation and Open Space Strategy identifies walking and bicycle trails as important community assets for the promotion of healthy lifestyles, tourism and recreation. Many trails including the Heysen Trail and the Encounter Bikeway use road reserves for some trail sections.

The use of recreational trails should be encouraged, however sites of Category 1, 2 or 3 vegetation should be carefully monitored and if necessary impact minimising structures (eg fencing and boardwalks) installed.
3.14 Cultivation and Cropping of Roadsides

POLICY: 22

Council will not permit ploughing or grading of roadsides other than in exceptional circumstances as approved by the responsible authority – which in the case where native vegetation would be cleared, is the Native Vegetation Council.

Disturbing the soil by ploughing or grading is likely to:
- destroy any remaining indigenous vegetation;
- encourage weeds;
- disrupt drainage and cause soil erosion.
3.15 Removal of Plant Material

3.15.1 Seed Collection and live plant material

POLICY: 23

Application to Council is required for the collection of seed, plant propagating material and any plant parts from all Council reserves and roadsides. If approval is granted the 12 month issued permit must be carried. Permission is contingent on complying with the requirements of a “Code of Practice”. Unauthorised collection is prohibited.

A permit is also needed under the National Parks and Wildlife Act, and can be requested from the Department for Environment and Heritage.

Activities involving live timber harvesting or brush-cutting (broom-bush) are also subject to the provisions of the Native Vegetation Act 1991, and the approval of the Native Vegetation Council. Similarly flower harvesting and commercial seed and fruit collection may need NVC consent (should substantial damage to native vegetation be likely).

Remnant roadside vegetation provides a source of native seed stock that is adapted to local environmental conditions.

This seed can be used to revegetate sections of cleared land with plants that have a similar genetic composition to the vegetation that would have existed in the area prior to European settlement. Restoring areas with local vegetation can help to reverse land degradation, thereby improving the economic sustainability of the land, and reduce the sedimentation of waterways.

The CVH and the DCY encourages the use of such seed for local revegetation projects, but to prevent exploitation of this resource, controls are imposed on the collection of seed.

Both Councils have developed a permit system to monitor and regulate the collection of propagation materials by commercial collectors and community groups.

A fee as determined by councils Natural Resources Manager will be charged for seed that is not intended for use within the region.

Council recognises that collection from rare, vulnerable and endangered material should be carefully monitored to ensure that individual or groups of plants are not damaged.

The DCY and the CVH also recognises that propagation materials have to be collected from these plants to extend their range and boost numbers within the area of their former distribution.

Council requests that 10% of seed collected be donated to council as goodwill. The donated seed will be used for roadside or other local rehabilitation projects.

As applicable, seek approval from the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.
3.15.1.1 Collection of seed and propagating material - Code of Practice

Always source propagating material from the nearest suitable location to the revegetation site.

Collect mainly basic colonising and structural species, appropriate for the vegetation community.

A Council permit and National Parks and Wildlife (SA) permit must be carried at all times whilst collecting and must be shown upon request.

Any threatened plant which is protected (listed specifically in regulations) under the National Parks and Wildlife Act 1972 will also require a separate permit from the Department for Environment. Threatened species or habitats are not to be collected from without express permission under the National Parks and Wildlife Act regulations.

Details of the local project, target species, estimated quantities of propagating material, and collection sites must be provided prior to permission being granted by Council.

Collectors should conform with the requirements of the Occupational Health Safety and Welfare Act 1986 (including the wearing of relevant safety gear such as safety vests and sun hats; and maintaining a current and accessible first aid kit at all times) and shall ensure non-interference with safe movement of road traffic. Use adequate signage and safety vests, when working adjacent to an open public roadway. Collectors are responsible for implementing their own OH&S standards.

Council accepts no liability/responsibility for any loss, damage or accident incurred by collectors.

No plant material may be collected from sites marked by the Roadside Marker System without Council approval.

Collectors must be responsible and professional collecting only what has been approved and required for the designated project.

Plant parts may be collected for the purpose of gaining a positive identification by an expert in native vegetation.

Plant propagation material is only to be collected from plants positively identified. If unsure no collection is to take place.

Plant recognition and identification aids are to be carried in vehicles to confirm species identification.

Ensure that fruits are mature and pods are ripe when collecting seed. Many pods change from green to a brown-grey or they may split when ripe.
Where seed is retained on a plant it should be at least twelve months old before collection.

Observe when shrubs and trees are in flower to better prepare your collection timetable.

Do not over nor repeatedly collect from any site or population.

Collection from solitary plants is discouraged. Avoid collecting from solitary plants and concentrate on stands or groups of plants.

Collect only from healthy plants (having neighbours within 20 metres); and from a spread of at least five (5) plants of the same species spread at least 100m apart over each site nominated.

Do not take all cutting or seed material from one plant. Move between plants of the same species.

Collect from all sections of the plant, not just a few side or low branches.

All cuts shall be conservative and not too injurious to the plant.

No limbs greater than 10mm diameter will be removed.

Capsules and fruit shall be cut to minimise removal of other plant parts.

No more than 20% (or 1% of above-ground biomass) of the propagating material shall be removed from any one plant.

Adequate precautions will be taken to ensure minimal track damage from vehicles or foot traffic.

Vehicles shall not be driven off existing tracks or roads.

Gates will be left as found.

Take due care to collect in the most environmentally sensitive manner to avoid trampling adjacent plants including low shrubs, herbs and ground covers such as grasses, reeds, ferns, moss and lichens.

Use appropriate equipment to avoid damage to plants, adequately supervise groups and use judicious cuts.

Avoid collection on fire ban days and under strong windy conditions.

All nesting sites, tree hollows and other habitat is to be left undisturbed.

Minimise the spread of known weeds, diseased plant material and pathogens such as Phytophthora when moving between plant populations.

Weed seeds and fungal spore transport will be adequately managed from one site to another on equipment, vehicles, clothing and footwear: by cleaning
equipment, machinery and footwear before and after working in an area. (Cleaning shall include soil removal and sterilising treatment where appropriate).

**Material harvested in excess of requirements** shall be dispersed on site or along road reserves nearby.

**Batches of seeds shall be labelled** with collector name, species, location, weight and a grid reference or other clear reference denoting the location of the collection site.

**Store all seed collected** in a cool, dark and dry location in sealed containers.

### 3.15.2 Firewood Collection

**POLICY: 24**

**Activities involving the removal of native plant material (excepting seed and some small branch and leaf collection by permit) will not be permitted by council. Collection of firewood is prohibited.**

The collection of firewood from council road reserve is prohibited. Fallen and standing dead timber is important habitat for wildlife eg. reptiles and small native plants (adapted to and protected by the sheltered conditions provided by fallen timber), and is important in the recycling of nutrients.

Councils will investigate opportunities to provide educational information to landholders of the value of fallen and standing timber for wildlife whilst at the same time inform landholders of this policy, so as to discourage unauthorised collection.
3.16 Maintenance of Vegetation Diversity

POLICY: 25

The Southern Fleurieu Councils will protect and maintain remnant vegetation by budgeting for protection and maintenance work, encouraging Bush for Life volunteers and seeking external funds.

There are an increasing number of locations where roadside vegetation is actively managed by community groups to maintain biological diversity, or to promote regeneration of native species (“Bush for Life”). This may involve weeding, controlled burning, fencing and rubbish collection. The City of Victor Harbor currently has five Bush for Life sites and would like to encourage more volunteers to commit to other important sites. The District Council of Yankalilla does not currently have any Bush for Life sites but is eager to encourage the adoption of the scheme.

Landholders must maintain adjacent roadsides free of listed weeds under NRM Board regulations. Council approval is not required.

Council approval for vegetation clearance will be required when any measures involving lopping, burning or other disturbance of native vegetation are proposed. NVC approval will also be required for any disturbance to vegetation outside the parameters indicated in the SFP RVMP.
3.17 Protection of Vegetation of High Conservation Significance

POLICY: 26

Roadsides locations that contain plants or vegetation types of high conservation significance (e.g. rare or endangered) must be identified, recorded and protected.

In 1997 the Native Vegetation Management Committee of the Southern Local Government Component, Mount Lofty Ranges Catchment Program commissioned a survey of the Remnant Roadside Vegetation on the Fleurieu Peninsula (Michael Hyde). The mapped data and report has enabled a detailed management strategy to be developed which takes into account significant remnant vegetation, rare species, communities of conservation significance and revegetation planning.

A number of recommendations are included in the report.

The following have been completed:

- That the undeveloped road reserves be surveyed for remnant vegetation (survey no. 40 District Council of Yankalilla and no.41 City of Victor Undeveloped Road Reserve Vegetation Survey P. Clark);
- That pre-European vegetation mapping be completed for the districts to ensure revegetation is appropriate (done for some of the district i.e. Salinity and Water Quality Management in the Inman River, Waitpinga, and Coolawang Creek Catchment DWLBC Report 2004/05 by Craig Liddycoat, Bill New and Tim Herrmann).

Recommendations which have not been completed should be actioned as part of this RVMP and include:

- That searches for further populations of conservation significant species be made
- That significant sites be protected and marked (all Category 1 and some Category 2 marked in City of Victor Harbor, all category 1 marked in Yankalilla District)
- That district vegetation management strategies including revegetation be developed
- That pre-European vegetation mapping be completed for the districts to ensure revegetation is appropriate (done for some of district i.e Salinity and Water Quality Management in the Inman River, Waitpinga, and Coolawang Creek Catchment DWLBC Report 2004/05 by Craig Liddycoat, Bill New and Tim Herrmann)
- That additional data be collected and recorded in a format suitable for inclusion in the GIS based map coverage. (The City of Victor Harbor has developed a woody weed database)

The following details are included in Hyde’s Survey of Remnant Roadside Vegetation:

- assessment of impacts and degrading factors on roadside vegetation;
- definition of vegetation management categories (based on the categories of overall significance); and
- identification of significant sites (which forms the basis of a roadside marker scheme).
Specific measures to identify and protect sites containing plants or vegetation of high conservation significance have been developed from the survey and include:

- a site marking system to identify significant sites, particularly for Council staff or contractors;
- a site register or database for significant roadside flora;
- training programs for Council staff and others (eg contractors) and development of work procedures to ensure protection of significant sites;
- establishment of bush for life sites.

GUIDELINES

Identify areas of weed and pathogen infestation.

Ensure Council staff and contractors are trained to identify and protect important sites

Ensure Bush for life volunteers are familiar with the requirements of the RVMP.

Plan weed removal

Do not ‘tidy up’ roadside vegetation.

Do not store materials or machinery near trees or native vegetation.

When gaps exist between clumps of quality roadside vegetation those sections should be protected from slashing to encourage regeneration from adjacent vegetation.
3.18 Rehabilitation

Clearance of vegetation associated with roadworks will be minimised (See guidelines in Sections 2 and 3), but where unavoidable off-target clearance does occur, methods will be used to rehabilitate the areas.

Natural regeneration, and weed and pest control (and where necessary using topsoil) should be the main methods of rehabilitation, but where gaps exist or where these methods are not working, active regeneration techniques will be considered (see Section 19).

On roadsides containing some remnants of native vegetation it may be possible to encourage natural regeneration through control of exotic weeds and grasses, and possibly pest control.

Minimum disturbance techniques should be used for weed control, for example start in areas of least infestation and avoid soil disturbance.

GUIDELINES

**Topsoil should be stockpiled** for use in rehabilitation works during roadworks where there has been some unavoidable clearance of vegetation, which requires rehabilitation.

**Strip and stockpile topsoil** from areas of good native vegetation. Re-use as soon as possible.

**Locate soil stockpiles** containing listed weed seed bank in the most degraded area of the site.

**Stockpiles and construction compounds** should be located on land already cleared of native trees, shrubs and grasses. This may be available on nearby private land.

**Mark stockpile areas** with a fence, bunting or large logs to prevent the stockpile area from spreading.

**Do not push stockpiles** into surrounding vegetation.

**Stockpile topsoil from areas of native vegetation** topsoil contains plant nutrients, soil biota and the seeds of local native plants. Make sure that weedy topsoil is not imported from another site into good native vegetation.

**Strip the upper 100 – 200mm of topsoil** before starting any major works, make sure that topsoil is not mixed with poor subsoil.

**Locate soil stockpiles in cleared areas**, away from existing drainage lines, trees, shrubs and native grasses. Remove any weeds before stockpiling by spraying or scalping.

**Topsoil should ideally be stockpiled for less than 12 months** to make sure that the seed in the soil remains viable.

**Avoid “Tidying Up” Vegetation.** Grading the roadside, spreading topsoil into vegetation and thinning out plants causes unnecessary disturbance to the soil and vegetation and spreads weeds.
Roadwork or other construction or maintenance activities can result in significant disturbance to a site. It is desirable to rehabilitate the site if possible to the standard before works commenced, or better.

The intent of the Southern Fleurieu Peninsula Councils is to re-establish indigenous vegetation and preserve habitat components during the rehabilitation of roadsides.

POLICY: 27

Regenerating indigenous vegetation will be protected and encouraged to grow along all roadsides in the Council district except where:

- roadsides are designated as strategic or tactical firebreaks as specified in the District Bushfire Prevention Plan (see Section Bushfire Prevention)
- EDPTI overhead powerlines exist
- EDPTI assets and strategic firebreaks have been – combined on Category 1 roadsides
- Service authorities locate their assets on the roadside (see Section Installation of Services)
- Regenerating vegetation growing within the effective part of the table drain interferes with the working of the drain (see Section Road Construction & Road Maintenance)
- Regenerating vegetation interferes with maintaining sight distances (see Section Verge clearance for sight distance)
- Regenerating vegetation is on the road shoulder and interferes with the structure of the road (see Section Road Construction & Road Maintenance)
- Regenerating vegetation interferes with structures and signs located on the road reserve
- Road construction and road widening is necessary (see Section Road Construction & Road Maintenance)
- Exotic plants of historical or cultural significance create a feature on the roadside
- Formal crossings exist.
3.20 Revegetation

In areas where roadside has been substantially modified it may not be possible to re-establish vegetation by simply allowing indigenous vegetation to regenerate naturally. Introducing other local plants to restore the ecological balance and to link vegetation corridors can provide improved habitat for wildlife which can be achieved quickly by direct seeding or tubestocking.

Both methods have advantages and disadvantages. Direct seeding requires a great number of seeds and the right conditions for germination, but the cost per plant is low and the process better mimics the natural processes. Planting out seedlings requires fewer plants and the success rate is often higher, but the cost is also higher. The best technique may be a combination of both methods.

Revegetation would be directed on Category 5 roadsides to link areas such as wildlife corridors, or improve the quality of Category 2, 3 and 4 roadsides where rehabilitation methods (eg natural regeneration, weed control) have not been successful or are not sufficient to re-establish roadside native vegetation.

Weed control both prior to and post planting are important factors in the success of restoring vegetation. Each restoration project requires the preparation of an individual plan appropriate for the particular site. There is a great deal of information available which should be consulted in order to develop the most suitable revegetation plan.

Revegetation: Principles, Planning, Techniques and Species Selection of the (Salinity and Water Quality Management in the Inman River, Waitpinga and Coolawang Creek Catchments -DWLBC Report 2004/05) will be consulted as a basis for revegetation design and planning for both council districts. This report can be viewed in Appendix 2

POLICY: 28

Council will adopt where appropriate revegetation strategies to achieve improved land management on roadsides under its care and control.

GUIDELINES

A site specific assessment and botanical survey should be carried out for a nominated site, prior to undertaking any proposed revegetation project.

The Officer Responsible for Natural Resources must be contacted prior to commencement of any restoration or revegetation projects.

PIRSA can be consulted to provide advice on the most appropriate revegetation methods.

Planting projects must consider Bushfire Prevention requirements as per the regional plan.

On Category 1 roadsides where a relatively pristine community of indigenous vegetation remains, vegetation should be left to regenerate naturally.
When gaps exist between clumps of quality roadside vegetation those sections should be protected from slashing to encourage regeneration from adjacent vegetation.

Where a roadside is classified as Category 1 due to the presence of a rare, threatened or significant flora species, but is otherwise degraded, DENR should be consulted to determine if seed should be collected and supplementary plantings of the species and other indigenous vegetation be undertaken.

On Category 2 roadsides, seed should be collected from the roadside or from any indigenous vegetation adjacent to the roadside where the project is being undertaken. If the adjacent land is privately owned permission should be sought from the landholder before any seeds are collected. A permit is required from DENR, to collect seed on Crown Land and roadsides.

Care will be taken to ensure that the original vegetation type of the area is restored.

On Category 3 roadsides local seed from indigenous vegetation will be used in restoration or revegetation projects.

In areas that are substantially degraded indigenous vegetation may no longer be suitable for restoration or revegetation projects.

When locally adapted vegetation is not suitable, for example on a salt affected roadside, care must be taken to ensure the vegetation will not become a weed species or hybridise with local indigenous vegetation.

All restoration or revegetation projects should be planned one year in advance to allow for a range of seeds to be collected from the upper, middle and lower layers of vegetation.

All restoration or revegetation projects should be carried out during the correct season, either late autumn to early spring, to take advantage of the weather conditions.

All restoration or revegetation projects will include an outline of the long term maintenance of the site for approximately five years post planting.

Strategic Wildlife Corridors will be given priority when restoring or revegetating roadsides.

Native grasslands will not be rehabilitated with trees and shrubs, unless it is ecologically justified. DENR or the Native Grass Resources Group should be consulted prior to rehabilitating native grassland sites.

On selected revegetation sites, care should be taken to protect and incorporate where appropriate, existing native vegetation eg native grasses, identified during initial site assessment. Choose the best methods for revegetation under such circumstances to minimise impacts from mechanical disturbance or herbicide applications.

All restored or revegetated areas should be clearly marked or identified on the ground to protect newly planted vegetation from any damage.
Section 4 Risk Assessment and Management of Key Threats

4.1 Risk Assessment and Key Threat Management

The purpose of a risk assessment is to identify the key threats to roadside vegetation and their likelihood of occurring in order to develop appropriate control measures to minimise or eliminate the risk. A process of identifying and managing risk is suggested here.

It is important therefore to undertake some form of risk assessment when planning any activity that may adversely impact on roadside vegetation.

This section includes:

- results of a risk assessment (ie. a roadside impact matrix);
- a roadside management matrix that identifies actions or activities that are acceptable for different categories of roadside vegetation and the necessary control procedures to protect vegetation.

For routine or recurring activities, a risk assessment would usually only need to be undertaken once, and thereafter the control measures (e.g. a standard operating procedure for patrol grading, or a procedure for dealing with requests to collect firewood) developed as a result of the risk assessment, would continue to apply.
4.2 Risk Assessment Guidelines

An environmental risk assessment is used to:

- identify the level of risk of damage from any activity to roadside vegetation; and
- develop appropriate control measures.

The following guidelines identify risks and determine control measures for this RVMP. An outcome of the process is a roadside impact matrix (Table 4.4).
4.3 **Determine Severity of Consequences**

The severity of the consequences of an activity is categorised on a descriptive scale, from negligible to disastrous. Table 4.1 shows an example based on impacts to good quality roadside vegetation.

**Table 4.1. Severity of Consequences of Management Impacts on Native Vegetation**

<table>
<thead>
<tr>
<th>Severity</th>
<th>Description of Environmental Consequences¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligible</td>
<td>No demonstrable or measurable effect.</td>
</tr>
<tr>
<td>Minor</td>
<td>Few plants affected. No damage to threatened species or vegetation of conservation significance. No long-term damage to vegetation.</td>
</tr>
<tr>
<td>Major</td>
<td>Significant numbers of plants killed. Limited damage to threatened species or vegetation of high conservation significance or moderate damage to vegetation of lower conservation significance. Damage reversible in less than five years.</td>
</tr>
<tr>
<td>Severe</td>
<td>Substantial damage to vegetation. Moderate damage to threatened species or vegetation of high conservation significance or severe damage to vegetation of lower conservation significance. Eventual recovery possible, but not necessarily to the same pre-incident conditions.</td>
</tr>
<tr>
<td>Disastrous</td>
<td>Irreversible and irrecoverable changes to areas of vegetation, with little prospect of recovery to pre-incident conditions. Extensive damage to and loss of vegetation of high conservation significance, possibly loss of threatened species.</td>
</tr>
</tbody>
</table>

¹Based on impacts to good quality native vegetation.
4.4 Determine Likelihood

Likelihood (or frequency) is the chance that the predicted consequences will occur. The likelihood of environmental consequences occurring can be categorised according to the qualitative criteria outlined in Table 4.2 below.

Table 4.2. Likelihood of Occurrence of Damage

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Qualitative description of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtually Impossible</td>
<td>Has almost never occurred, but conceivably could</td>
</tr>
<tr>
<td>Rare</td>
<td>Has occurred but only a few times</td>
</tr>
<tr>
<td>Unlikely</td>
<td>Occurs, but not likely</td>
</tr>
<tr>
<td>Likely</td>
<td>Likely to occur</td>
</tr>
<tr>
<td>Virtually Certain</td>
<td>Can be expected to occur more than once and includes continuous impact</td>
</tr>
</tbody>
</table>
4.5 Management of Risks to Roadside Vegetation

Measures that can be used to reduce the risk of impact to roadside vegetation and achieve legislative compliance are:

- Code of Environmental Practice – each broad activity (e.g., roadworks, animal and plant control, fire prevention) may have a specific Code of Practice.
- Standard Operating/Environmental Procedures - outline specific environmental management techniques and practices to be followed whilst undertaking various activities.
- Awareness and Training – on Council policy and requirements for roadside vegetation protection for staff, contractors, and landholders.
- Monitoring and Audits – for high-risk activities of Council as a means of informing managers whether vegetation protection standards are being met.
- Reporting - implementation of both internal and external reporting procedures to ensure that issues and/or incidents are appropriately responded to.
- General induction of new employees – include relevant requirements of the RVMP in the induction procedure.
- Standard contract specifications – inclusion of vegetation protection requirements or clauses within the master specification for each high-risk activity.

Risk Management can be determined by referring to (Table 4.3) which identifies the risks associated with roadside activities.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Hazard</th>
<th>Consequence</th>
<th>Severity</th>
<th>Likelihood</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proclaimed Plant Control –</td>
<td>Overspray</td>
<td>Severe/Major, Damage or damage to native plants</td>
<td>Severe/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>cover spraying</td>
<td>Herbicide spillage</td>
<td>Severe/Major, Damage to native plants</td>
<td>Severe/Major</td>
<td>Rare</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Vehicle access to roadside</td>
<td>Damage or damage to native plants</td>
<td>Major</td>
<td>Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>placing grading rill outside formation</td>
<td>Damage or damage to native plants (smothering)</td>
<td>Severe/Major</td>
<td>Unlikely</td>
<td>High</td>
</tr>
<tr>
<td>Patrol Grading</td>
<td>placing grading rill in table drain or</td>
<td>Siltation/smothering of native plants in roadside</td>
<td>Major</td>
<td>Unlikely</td>
<td>Medium/High</td>
</tr>
<tr>
<td></td>
<td>across turnouts</td>
<td>Damage to / destruction of native plants (eg grasses shrubs in roadside)</td>
<td>Severe/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td></td>
<td>turning grader in roadside</td>
<td>Damage to / destruction of native plants</td>
<td>Severe/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td></td>
<td>Slashing native grasses or other species</td>
<td>Destruction or damage to native plants</td>
<td>Severe</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Fire prevention</td>
<td>Over spraying of road shoulder</td>
<td>Destruction or damage to native plants</td>
<td>Severe</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td></td>
<td>Pesticide drift onto native vegetation</td>
<td>Destruction or damage to native plants</td>
<td>Disastrous/Severe</td>
<td>Likely/Unlikely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Clearing for fence replacement</td>
<td>Excessive or inappropriate method</td>
<td>Damage to / destruction of native plants</td>
<td>Severe/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Clearing for new driveways</td>
<td>Excessive or poorly located</td>
<td>Damage to / destruction of native plants</td>
<td>Minor/Major</td>
<td>Likely/Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td>Weed populations on</td>
<td>Invasion into roadside vegetation</td>
<td>Damage to / destruction of native plants</td>
<td>Minor/Major</td>
<td>Virtually certain</td>
<td>Medium/High</td>
</tr>
<tr>
<td>neighbouring property</td>
<td></td>
<td>Damage to / destruction of native plants</td>
<td>Minor/Major</td>
<td>Unlikely</td>
<td>Low</td>
</tr>
<tr>
<td>Seed harvesting</td>
<td>Excessive or damaging to native</td>
<td>Damage to / destruction of native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium</td>
</tr>
<tr>
<td>Firewood collecting</td>
<td>Firewood collection is prohibited –</td>
<td>Damage to / destruction of native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>illegal collection, vehicular damage to</td>
<td>Damage to / destruction of live or dead native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>surrounding vegetation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Hazard</td>
<td>Consequence</td>
<td>Severity</td>
<td>Likelihood</td>
<td>Risk</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Disposal of rubbish and waste materials</td>
<td>Illegal dumping, smothering or vehicular damage to surrounding vegetation, weed infestation from dumped garden refuse or soil</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely/Certain</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Weed control</td>
<td>Inappropriate or insensitive methods</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Vermin control</td>
<td>Inappropriate or insensitive methods</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td>New road construction (realignments, widening)</td>
<td>Poorly designed</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely/Unlikely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Roadwork activity (eg stockpiles, turning areas)</td>
<td>Poorly managed</td>
<td>Destruction or damage to native plants (smothering or physical damage)</td>
<td>Minor/Major</td>
<td>Likely/Unlikely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Vegetation control for sight distance</td>
<td>Inappropriate methods</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely/Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td>Drain clearing</td>
<td>Excessive or inappropriate disposal of drain spoil</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely/Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td>Service installation</td>
<td>Installation of services where cleared land exists elsewhere</td>
<td>Destruction or damage to native plants</td>
<td>Severe/Major</td>
<td>Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td>Service maintenance</td>
<td>In insensitive methods used to maintain services</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Unlikely</td>
<td>Low</td>
</tr>
<tr>
<td>Planting</td>
<td>Placement within intact native vegetation (e.g. trees in native grassland)</td>
<td>Destruction or damage to locally occurring native plant communities</td>
<td>Minor</td>
<td>Unlikely</td>
<td>Low</td>
</tr>
<tr>
<td>Grazing by stock</td>
<td>Grazing or trampling of roadside vegetation, soil erosion, excessive nutrient input</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Grazing by rabbits</td>
<td>Grazing of roadside or regenerating vegetation, soil erosion</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium</td>
</tr>
<tr>
<td>Activity</td>
<td>Hazard</td>
<td>Consequence</td>
<td>Severity</td>
<td>Likelihood</td>
<td>Risk</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td>Off-road vehicles</td>
<td>Damage to vegetation, soil erosion spread of plant diseases</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Plant disease (e.g. Phytophthora, Mundulla Yellows)</td>
<td>Spread of disease</td>
<td>Destruction or damage to native plants</td>
<td>Major/Severe</td>
<td>Likely/Certain</td>
<td>High</td>
</tr>
<tr>
<td>Fire regimes</td>
<td>Inappropriate regime may damage plant communities, risk of fire escape</td>
<td>Destruction or damage to native plants</td>
<td>Disastrous/Severe</td>
<td>Likely</td>
<td>High</td>
</tr>
<tr>
<td>Inappropriate fire prevention methods</td>
<td>Damage to roadside vegetation from actions like spraying slashing</td>
<td>Destruction or damage to native plants</td>
<td>Major/Severe</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Changes to hydrology</td>
<td>Erosion, spread of weed seed, change to soil moisture regime</td>
<td>Destruction or damage to native plants, change in species composition</td>
<td>Minor/Major</td>
<td>Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td>Dryland salinity</td>
<td>Dieback, change in vegetation to more salt tolerant species</td>
<td>Destruction or damage to native plants, change in species composition</td>
<td>Major/Severe</td>
<td>Likely</td>
<td>Medium</td>
</tr>
<tr>
<td>Lack of active management</td>
<td>Pest plant or animal invasion</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Unlikely</td>
<td>Medium</td>
</tr>
</tbody>
</table>
### 4.6 Roadside Impact Matrix

The roadside impact matrix (Table 4.4) provides a summary of activities or hazards, associated levels of risk and control measures for each activity.

**Table 4.4. Roadside Impact Matrix**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Level of Risk to Native Vegetation</th>
<th>Threat Posed By</th>
<th>Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proclaimed Plant Control – over spraying</td>
<td>Medium/High</td>
<td>Landholders, Weed Control Contractors</td>
<td>Education, Policy and Guidelines (RVMP), Pest and Animal Control Acts, APCB permit</td>
</tr>
<tr>
<td>Patrol grading</td>
<td>Medium/High</td>
<td>Council personnel or Contractors</td>
<td>Code of Practice Standard Operating Procedure Training</td>
</tr>
<tr>
<td>Fire prevention</td>
<td>Medium/High</td>
<td>Landholders, Motorists</td>
<td>District Bushfire Prevention Plan, Education</td>
</tr>
<tr>
<td>Neighbouring property spraying</td>
<td>Medium/High</td>
<td>Landholders</td>
<td>Education</td>
</tr>
<tr>
<td>Clearing for fence replacement</td>
<td>Medium/High</td>
<td>Landholders</td>
<td>Education, Native Veg. Act</td>
</tr>
<tr>
<td>Clearing for new driveways</td>
<td>Medium</td>
<td>Landholders</td>
<td>Education Native Veg. Act</td>
</tr>
<tr>
<td>Weed populations on neighbouring property</td>
<td>Medium/High</td>
<td>Landholders</td>
<td>Education, APCB Act</td>
</tr>
<tr>
<td>Seed harvesting</td>
<td>Low</td>
<td>General Public, Environmental Groups Commercial Collectors</td>
<td>Education, Permit System, Policy and Guidelines (RVMP)</td>
</tr>
<tr>
<td>Firewood collecting</td>
<td>Medium</td>
<td>General Public</td>
<td>Not Permitted; Education</td>
</tr>
<tr>
<td>Disposal of rubbish and waste materials</td>
<td>Medium/High</td>
<td>General Public</td>
<td>Illegal, Removed by Council</td>
</tr>
<tr>
<td>Vermin control</td>
<td>Medium</td>
<td>Landholders</td>
<td>APCB Act Education</td>
</tr>
<tr>
<td>New road construction (realignments, widening)</td>
<td>Medium/High</td>
<td>Council Personnel or Contractors</td>
<td>Code of Practice Standard Operating Procedure Training</td>
</tr>
<tr>
<td>Roadwork activity (eg stockpiles, turning areas)</td>
<td>Medium/High</td>
<td>Council Personnel or Contractors</td>
<td>Code of Practice Standard Operating Procedure Training</td>
</tr>
<tr>
<td>Vegetation control for sight distance</td>
<td>Medium</td>
<td>Council Personnel or Contractors</td>
<td>Code of Practice Standard Operating Procedure Training</td>
</tr>
<tr>
<td>Drain clearing</td>
<td>Medium</td>
<td>Council Personnel or Contractors</td>
<td>Code of Practice Standard Operating Procedure Training</td>
</tr>
<tr>
<td>Service installation</td>
<td>Medium</td>
<td>State Agencies, Corporations</td>
<td>Code of Practice Standard Operating Procedure Policy and Guidelines RVMP</td>
</tr>
<tr>
<td>Service maintenance</td>
<td>Low</td>
<td>State Agencies, Corporations</td>
<td>Code of Practice Standard Operating Procedure Policy and Guidelines RVMP</td>
</tr>
<tr>
<td>Planting</td>
<td>Low</td>
<td>Landholders, Council Personnel, Environmental Groups</td>
<td>Education, Policy and Guidelines RVMP</td>
</tr>
<tr>
<td>Grazing by stock</td>
<td>Medium/High</td>
<td>Landholders, Land managers</td>
<td>Education</td>
</tr>
<tr>
<td>Grazing by rabbits</td>
<td>Medium</td>
<td>Rabbits colonies</td>
<td>Destruction by APCB</td>
</tr>
<tr>
<td>Activity</td>
<td>Level of Risk to Native Vegetation</td>
<td>Threat Posed By</td>
<td>Control Measures</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Off-road vehicles</td>
<td>Medium/High</td>
<td>General Public, Landholders</td>
<td>Native Veg. Act, Education; Not permitted</td>
</tr>
<tr>
<td>Plant disease (e.g. Phytophthora, Mundalla Yellows)</td>
<td>High</td>
<td>General Public, Landholders, Council Personnel, Earthmoving Contractors</td>
<td>Education, Code of Practice, Standard Operating Procedure, Policy and Guidelines RVMP, Monitoring and Auditing</td>
</tr>
<tr>
<td>Inappropriate fire prevention methods</td>
<td>Medium/High</td>
<td>Council Personnel or contractors</td>
<td>Education, Code of Practice, Standard Operating Procedure, Policy and Guidelines RVMP</td>
</tr>
<tr>
<td>Changes to hydrology</td>
<td>Medium</td>
<td>Council Personnel or contractors</td>
<td>Education, Code of Practice, Standard Operating Procedure, Policy and Guidelines RVMP</td>
</tr>
<tr>
<td>Dryland salinity</td>
<td>Medium</td>
<td>Landholder inaction</td>
<td>Education, Revegetation/Fencing Incentives</td>
</tr>
<tr>
<td>Lack of active management</td>
<td>Medium</td>
<td>Council Personnel, Landholders</td>
<td>Education, Policy and Guidelines RVMP</td>
</tr>
</tbody>
</table>
4.7 Roadside Vegetation Management Matrix

A roadside vegetation management matrix can be used as a guide for anybody undertaking roadside activities that may impact on roadside vegetation. The matrix shows what activities are allowable in different categories of roadside vegetation.

The categories of vegetation are determined by drive-by vegetation surveys. Once significant or important vegetation associations have been identified it is important that appropriate management is adopted to reduce the impact of roadside activities on these areas.

The following matrix (Table 4.5) lists the five categories of roadside vegetation, ranging from vegetation with very high conservation value (pristine remnant vegetation) to vegetation with low conservation value (highly disturbed with little or no native vegetation).

These categories are based on roadside vegetation survey information and indicate the ecological importance or conservation value of the vegetation. Generally, each category corresponds with the categories of overall significance from the roadside survey. However, threatened / rare flora sites should be regarded as management category 1 regardless of their rating in the roadside survey.

It also lists the types of activities that often occur on roadsides, and indicates the types of restrictions (or management strategies) applicable to the five vegetation categories.

The following Roadside Vegetation Management Matrix has been adopted by the District Council of Yankalilla and The City of Victor Harbor.
### Table 4.5. Roadside Vegetation Management Matrix

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>Overall Significance / Management Category</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Value</td>
<td></td>
<td>VERY HIGH value.</td>
<td>HIGH value.</td>
<td>HIGH value.</td>
<td>MODERATE value.</td>
<td>MODERATE-LOW values.</td>
</tr>
<tr>
<td>2. Restrictions</td>
<td></td>
<td>Many restrictions apply</td>
<td>Restrictions apply</td>
<td>Restrictions apply</td>
<td>Some restrictions apply</td>
<td>Few restrictions apply</td>
</tr>
<tr>
<td>ROADSIDE MANAGEMENT RESTRICTIONS</td>
<td></td>
<td>GENERAL</td>
<td>Marking</td>
<td>Stockpiling</td>
<td>Borrow pits</td>
<td>Table drains (sealed)</td>
</tr>
<tr>
<td>General</td>
<td></td>
<td>AVOID ALL disturbance outside shoulder</td>
<td>Standard signs and list on register of roadside significant sites</td>
<td>NOT PERMITTED</td>
<td>NOT PERMITTED</td>
<td>DO NOT grade.</td>
</tr>
<tr>
<td>Marking</td>
<td></td>
<td>AVOID ALL disturbance outside shoulder</td>
<td>Standard signs and list on register of roadside significant sites</td>
<td>AVOID</td>
<td>AVOID</td>
<td>Cut or excavate only.</td>
</tr>
<tr>
<td>Stockpiling</td>
<td></td>
<td>LIMIT disturbance outside shoulder to designated sites</td>
<td>Not marked unless threatened species present</td>
<td>AVOID</td>
<td>AVOID</td>
<td>Obtain approval for new drains.</td>
</tr>
<tr>
<td>Borrow pits</td>
<td></td>
<td>LIMIT disturbance outside shoulder to designated sites</td>
<td>Not marked unless threatened species present</td>
<td>AVOID</td>
<td>AVOID</td>
<td>Grade carefully as required. MINIMISE DISTURBANCE.</td>
</tr>
<tr>
<td>Table drains (sealed)</td>
<td></td>
<td>LIMIT disturbance outside shoulder to designated sites</td>
<td>Not marked unless threatened species present</td>
<td>AVOID</td>
<td>AVOID</td>
<td>Grade as required. MINIMISE DISTURBANCE</td>
</tr>
<tr>
<td>Table drains (unsealed)</td>
<td></td>
<td>LIMIT disturbance outside shoulder to designated sites</td>
<td>Not marked unless threatened species present</td>
<td>AVOID</td>
<td>AVOID</td>
<td>Grade as required. MINIMISE DISTURBANCE</td>
</tr>
<tr>
<td>Shoulder widening</td>
<td></td>
<td>LIMIT if possible</td>
<td>REMOVE grading spoil</td>
<td>REMOVE grading spoil</td>
<td>REMOVE grading spoil</td>
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</tr>
<tr>
<td>Shoulder maintenance</td>
<td></td>
<td>AVOID Ridge road repair</td>
<td>REMOVED grading spoil</td>
<td>AVOID Ridge road repair</td>
<td>AVOID Ridge road repair</td>
<td>No restrictions</td>
</tr>
<tr>
<td>Drain turn-outs (sealed)</td>
<td></td>
<td>AVOID Ridge road repair</td>
<td>REMOVE grading spoil</td>
<td>AVOID Ridge road repair</td>
<td>AVOID Ridge road repair</td>
<td>MINIMISE graded turn-outs where possible.</td>
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<tr>
<td>CATEGORY</td>
<td>Overall Significance / Management Category</td>
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<td></td>
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</tr>
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<td>MODERATE value.</td>
<td></td>
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</tr>
<tr>
<td>2. Restrictions</td>
<td>Some restrictions apply</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>MODERATE-LOW values.</td>
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</tr>
<tr>
<td></td>
<td>Few restrictions apply</td>
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</tr>
<tr>
<td>1. Value</td>
<td>VERY HIGH value.</td>
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</tr>
<tr>
<td>2. Restrictions</td>
<td>Many restrictions apply</td>
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<td></td>
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<tr>
<td></td>
<td>HIGH value.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Restrictions apply</td>
<td></td>
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<td></td>
<td>HIGH value.</td>
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<td></td>
<td>Restrictions apply</td>
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<td></td>
<td>MODERATE value.</td>
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</tr>
<tr>
<td></td>
<td>Restrictions apply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Value</td>
<td>MODERATE-LOW value.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Restrictions</td>
<td>Few restrictions apply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ROADSIDE MANAGEMENT RESTRICTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drain turn-outs (unsealed)</td>
</tr>
<tr>
<td>Vegetation control</td>
</tr>
<tr>
<td>Service Installation</td>
</tr>
<tr>
<td>Service Maintenance</td>
</tr>
<tr>
<td>Revegetation</td>
</tr>
<tr>
<td>Seed Collection</td>
</tr>
<tr>
<td>Firewood Collection</td>
</tr>
<tr>
<td>Rubbish Dumping</td>
</tr>
<tr>
<td>Fire Management</td>
</tr>
<tr>
<td>Pest Plant Control</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Drain turn-outs (unsealed)</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Service Maintenance</td>
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<tr>
<td>Firewood Collection</td>
</tr>
<tr>
<td>Rubbish Dumping</td>
</tr>
<tr>
<td>Fire Management</td>
</tr>
<tr>
<td>Pest Plant Control</td>
</tr>
<tr>
<td>CATEGORY</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1. Value 2. Restrictions</td>
</tr>
<tr>
<td>Stock grazing</td>
</tr>
<tr>
<td>Stock Movement</td>
</tr>
<tr>
<td>Fenceline clearance</td>
</tr>
<tr>
<td>Fertiliser / Herbicide drift</td>
</tr>
<tr>
<td>Off-road access (parking, turning, detour)</td>
</tr>
<tr>
<td>Parking bays</td>
</tr>
</tbody>
</table>
Section 5 Implementation of the RVMP

5.1 Implementation

A key function of the RVMP is a Council internal assessment and approval process to ensure that any proposed activity will comply with the *Native Vegetation Act 1991*. For routine activities such as road maintenance where the activity zone is consistent and can be clearly defined in the RVMP, ongoing compliance may be achieved by obtaining endorsement by the Native Vegetation Council for a standard Council operating procedure. For other activities where the activity and impact is less predictable or may vary (eg road construction), a process of case-by-case assessment and approval is required.

The basic steps of an approval process are:

- assess the impact (of the proposed activity);
- determine the appropriate approval level (internal or external);
- determine environmental constraints and controls for the activity;
- obtain approval;
- issue appropriate advice (instruction or permit) subject to appropriate conditions;
- inspect to ensure compliance with the approval conditions.

This section of the RVMP briefly describes Council’s approval process for activities that may affect roadside vegetation. The basic steps of a roadside activity approval procedure are illustrated in the following flow chart.
5.2 Roadside Activity Approval Procedure

<table>
<thead>
<tr>
<th>Action</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Determine impact of activity</td>
<td>• Refer to Risk Assessment Guidelines (pages 101 to 109)</td>
</tr>
<tr>
<td></td>
<td>• Consult a vegetation expert</td>
</tr>
<tr>
<td>2 Determine Level of Approval Required</td>
<td>• Refer to Roadside Vegetation Management Matrix (page 110 to 113)</td>
</tr>
<tr>
<td></td>
<td>• Refer to Vegetation Assessment and Approval Table (Table 5.4 page 151)</td>
</tr>
<tr>
<td>3 Determine Constraints &amp; Controls</td>
<td>• Refer to Roadside Vegetation Management Matrix (page 110 of 113)</td>
</tr>
<tr>
<td></td>
<td>• Refer to Roadside Impact Matrix (pages Table 4.4 page 108 to 109)</td>
</tr>
<tr>
<td></td>
<td>• Refer to Code of Practice</td>
</tr>
<tr>
<td></td>
<td>• Refer to Roadside Significant Site Database</td>
</tr>
<tr>
<td>4 Issue Advice</td>
<td>• Written instruction</td>
</tr>
<tr>
<td></td>
<td>• Work order</td>
</tr>
<tr>
<td></td>
<td>• Permit</td>
</tr>
</tbody>
</table>

The following sections explain how the RVMP will be implemented.

Figure 5.1. Roadside Activity Approval Procedure
5.3 Roles and Responsibilities

This section outlines each Council’s organisational structure.

**CITY OF VICTOR HARBOR - ORGANISATIONAL CHART – November 2011**

![Organisational Chart](image)

**Figure 5.2. City of Victor Harbor, Roles and Responsibilities**
Figure 5.3. District Council of Yankalilla, Organisational Chart District Services – Depot (as at October 2008)
Figure 5.4. District Council of Yankalilla, Organisational Chart District Services – Office (as at May 2009)
Table 5.1. District Council of Yankalilla RVMP staff responsibilities table

<table>
<thead>
<tr>
<th>RVMP RESPONSIBILITIES</th>
<th>COUNCIL OFFICER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Construction</td>
<td>Manager Operations</td>
</tr>
<tr>
<td>Road Maintenance and Minor Construction</td>
<td>Manager Operations</td>
</tr>
<tr>
<td>Verge Maintenance for Sight Distance</td>
<td>Manager Operations</td>
</tr>
<tr>
<td>Installation and Maintenance of services</td>
<td>Manager Operations</td>
</tr>
<tr>
<td>Pest Animal Control</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Pest Plant Control</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Soil-borne Pests and Diseases</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Clearing along Fence Lines</td>
<td>Manager Operations</td>
</tr>
<tr>
<td>Property Access</td>
<td>Infrastructure Planner</td>
</tr>
<tr>
<td>Bushfire Hazard Reduction</td>
<td>Manager Operations</td>
</tr>
<tr>
<td>Grazing of Roadsides</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Movement of Stock through Road Reserves</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Recreational use of Road Reserves</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Cultivation and Cropping of Roadsides</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Removal of Plant Material (seed collection and firewood)</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Maintenance of Vegetation Diversity</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Revegetation</td>
<td>Manager District Services</td>
</tr>
<tr>
<td>Risk Assessment and Management</td>
<td>Manager District Services</td>
</tr>
</tbody>
</table>

Table 5.2. City of Victor Harbor RVMP staff responsibilities table

<table>
<thead>
<tr>
<th>RVMP RESPONSIBILITIES</th>
<th>COUNCIL OFFICER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Construction</td>
<td>Manager Infrastructure</td>
</tr>
<tr>
<td></td>
<td>Manager Operations</td>
</tr>
<tr>
<td></td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Road Maintenance and Minor Construction</td>
<td>Manager Operations</td>
</tr>
<tr>
<td></td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Verge Maintenance for Sight Distance</td>
<td>Manager Operations</td>
</tr>
<tr>
<td></td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>RVMP RESPONSIBILITIES</td>
<td>COUNCIL OFFICER</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Installation and Maintenance of services</td>
<td>Manager Operations</td>
</tr>
<tr>
<td></td>
<td>Manager Environment &amp; Recreation</td>
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<tr>
<td>Pest Animal Control</td>
<td>Manager Operations</td>
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<td></td>
<td>Manager Environment &amp; Recreation</td>
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<tr>
<td>Pest Plant Control</td>
<td>Manager Operations</td>
</tr>
<tr>
<td></td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Soil-borne Pests and Diseases</td>
<td>Manager Operations</td>
</tr>
<tr>
<td></td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Clearing along Fence Lines</td>
<td>Manager Operations</td>
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<td>Manager Environment &amp; Recreation</td>
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<tr>
<td>Property Access</td>
<td>Manager Operations</td>
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<tr>
<td></td>
<td>Manager Environment &amp; Recreation</td>
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<tr>
<td>Bushfire Hazard Reduction</td>
<td>Manager Operations</td>
</tr>
<tr>
<td></td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td></td>
<td>Bushfire Prevention Officer</td>
</tr>
<tr>
<td>Grazing of Roadsides</td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Movement of Stock through Road Reserves</td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Recreational use of Road Reserves</td>
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</tr>
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<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Removal of Plant Material (seed collection and firewood)</td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Maintenance of Vegetation Diversity</td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>Manager Operations</td>
</tr>
<tr>
<td></td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Revegetation</td>
<td>Manager Environment &amp; Recreation</td>
</tr>
<tr>
<td>Risk Assessment and Management</td>
<td>Manager Operations</td>
</tr>
<tr>
<td></td>
<td>Manager Environment &amp; Recreation</td>
</tr>
</tbody>
</table>

The above staff are also responsible for maintaining the RVMP, including updates reflecting any relevant organisational or legislative changes that may occur.
5.4 Requirements for Staff and External Service Providers

All Staff and External service providers (e.g. contractors) are required to comply with the guidelines and codes of practice of the SFP RVMP. All personnel must have appropriate and current training in vegetation management. The following environmental code of practice and Job Environmental Analysis (JEA) is included in contracts to ensure the protection of native vegetation. Copies of the JEA can be generated from appendix 1.

External Service Providers (e.g. contractors) Environmental Code of Practice

1. Protect native vegetation and natural regeneration.
2. Avoid working where root damage and soil compaction may occur.
3. Only use herbicides where control of vegetation by mechanical methods is inappropriate. Avoid over-spray by not spraying in windy conditions.
4. Avoid “cleaning up” vegetation. Retain stumps, dead wood and understorey where possible.
5. Remove drain spoil and dispose of appropriately.
6. Locate stockpiles, turn-out or lay-down areas on existing cleared land.
7. Carefully prune trees using low impact methods.
8. Avoid damaging undergrowth when removing trees.
9. Only use the appropriate type and minimum size of machinery for the job.
10. Only use soil or fill from a weed or disease free site.
11. Clean down machinery in appropriate areas before entering and when leaving work site.
12. Dispose of waste materials at an appropriate site or depot.
13. Clearly mark the limits of stripping and all other construction zones.
14. Always stay within the construction zone.
15. Keep machinery and stockpiles on previously cleared land.
17. If there is no alternative to burning, do not burn close to desirable vegetation.
18. Strip and stockpile topsoil from areas of good native vegetation. Re-use as soon as possible.
19. Control erosion:
   - remove as little vegetation as possible and encourage the growth of native vegetation on batters;
   - leave batters roughened to hold the soil and encourage regrowth;
• limit access and earthworks to the area required for construction;
• establish adequate drainage systems.

20. Ensure clearance envelopes are maintained to the specifications in Section 4 of the Management Guidelines of the Southern Fleurieu RVMP.

21. Always keep machinery and personnel within the road formation zone.

22. Keep machinery and stockpiles on previously cleared land.

23. Chip light material from tree removal and use as mulch to spread local seed. (only use material for mulch if known not to contain weed seed or propagative material).

24. Clean down machinery before leaving work site.


25. Avoid trampling or vehicle damage to native plants.

26. Avoid smothering of native plants with other plant materials.

27. Do not remove woody weeds that contain viable seeds.

28. Carefully remove weedy plant materials that may self propagate vegetatively.

29. Observe equipment hygiene procedures to avoid the transfer of weeds.

30. Inspect sites prior to slashing or spraying to determine the native species composition and determine appropriate methods.

31. If unsure about any environmental controls, contact the site supervisor.
Job Environmental Analysis (JEA) Checklist for Staff, Contractors and External Service Providers

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Job Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadworks - Construction</td>
<td></td>
</tr>
<tr>
<td>Roadworks - Maintenance</td>
<td></td>
</tr>
<tr>
<td>Service Install/Maintenance</td>
<td></td>
</tr>
<tr>
<td>Animal &amp; Plant Control</td>
<td></td>
</tr>
<tr>
<td>Revegetation/Rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Location

<table>
<thead>
<tr>
<th>Location Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Name:</td>
</tr>
<tr>
<td>Section:</td>
</tr>
<tr>
<td>Road Number:</td>
</tr>
<tr>
<td>Length (km):</td>
</tr>
<tr>
<td>From:</td>
</tr>
<tr>
<td>To:</td>
</tr>
</tbody>
</table>

Project Manager/Supervisor:

Department/Contractor undertaking work:

Start Date: | Finish Date:

Action / Quantity

**PLANNING**

- Will there be any deviation from the existing alignment?
- Will the road formation be widened?
- Will the new alignment and cross-section alter the existing safety Clearance Envelope for vegetation?
- Will services need relocation?
- Does the site have any roadside vegetation?
- Does adjacent land have any native vegetation?
- Is any native vegetation clearance required?
- What is its conservation value / management category?
- Is vegetation clearance consistent with the RVMP?
- Are there any rare or threatened species present?
- Are there any threatened plant communities present?
- What native vegetation protection is required?
- What approval for vegetation clearance is required?
- Are there any special restrictions or requirements for undertaking work in this area?
- Has the area of vegetation disturbance been identified and marked on site?
- Are there any proclaimed weed species present?  
  - What control is required?
- Are weed or disease control measures required in this area (ie. vehicle hygiene requirements)
<table>
<thead>
<tr>
<th>Job Type</th>
<th>Job Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadworks - Construction</td>
<td></td>
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<tr>
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</tr>
<tr>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Revegetation/Rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

- Are there any proclaimed animal species present?  
  - What control is required?

- Are vehicle turnouts required?  
  - Have suitable vehicle turnouts sites been identified?

- Is any stripping of vegetation and topsoil required?  
  - Have suitable stockpile or staging areas been identified?

- Is there a natural watercourse in the vicinity?  
  - What protection is required?

- Will this activity result in the alteration to drainage?  
  - Have alterations to drainage been considered?  
  - Have the appropriate steps been taken to minimise the impact of drainage alterations on roadside vegetation?  
  - Have appropriate spoil management practices been chosen to minimise vegetation disturbance?

- Will this activity result in the generation of sediment?  
  - Have the appropriate steps been taken to minimise the impact of sedimentation on roadside vegetation?

- Are traffic management measures required?  
  - Will they impact roadside vegetation?  
  - Have the appropriate steps been taken to minimise the impact on roadside vegetation?

- Is any extraction of raw material (eg. fill, gravel, water) required?  
  - Have all project personnel (including contractors) received the appropriate environmental training for the task?

- Are rehabilitation or revegetation measures required?  

**UNDEARTAKING TASK**

- Has the task footprint or activity zone been identified or marked on site?

- Have significant vegetation sites with a buffer area (25m) been flagged off to prevent disturbance?

- Are adequate vehicle hygiene practices being followed?

- Are weather conditions being taken into account when undertaking specific activities (eg. spraying, grading)?

**TASK COMPLETION AND ASSESSMENT**

- Were any areas outside the activity zone cleared?

- Were the designated vehicle turnouts(stockpile sites used?)
### Job Type | Job Description
---|---
Roadworks - Construction | 
Roadworks - Maintenance | 
Service Install/Maintenance | 
Animal & Plant Control | 
Revegetation/Rehabilitation | 
Other | 

Were appropriate vehicle hygiene practices followed?

Was the impact of drainage alterations on roadside vegetation kept to a minimum?

Was the impact of sedimentation on roadside vegetation kept to a minimum?

Have appropriate site clean-up or rehabilitation activities been carried out?

**Checklist completed by:**

**Position/Title:**

**Date:**

<table>
<thead>
<tr>
<th>Approved</th>
<th>Not Approved</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

**Reason:**

Roadside vegetation protection requirements to be included in work orders and contract specifications will be based on the risks identified through the Risk Assessment process referred to below.

**Table 5.3. Risk Assessment.**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hazard</th>
<th>Consequence</th>
<th>Severity</th>
<th>Likelihood</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proclaimed Plant Control – cover spraying</td>
<td>Overspray</td>
<td>Destruction or damage to native plants</td>
<td>Severe/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td></td>
<td>Herbicide spillage</td>
<td></td>
<td>Severe/Major</td>
<td>Rare</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Vehicle access to roadside</td>
<td></td>
<td>Major</td>
<td>Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td>Patrol Grading</td>
<td>placing grading rill outside formation</td>
<td>Destruction or damage to native plants (smothering)</td>
<td>Severe/Major</td>
<td>Unlikely</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>placing grading rill in table drain or across turnouts</td>
<td>Siltation /smothering of native plants in roadside</td>
<td>Major</td>
<td>Unlikely</td>
<td>Medium/High</td>
</tr>
<tr>
<td></td>
<td>turning grader in roadside</td>
<td>Damage to / destruction of native plants (eg grasses shrubs in roadside)</td>
<td>Severe/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Fire prevention</td>
<td>Slashing native grasses or other species</td>
<td></td>
<td>Severe</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Activity</td>
<td>Hazard</td>
<td>Consequence</td>
<td>Severity</td>
<td>Likelihood</td>
<td>Risk</td>
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</tr>
<tr>
<td>(continued)</td>
<td>Over spraying of road shoulder</td>
<td>Destruction or damage to native plants</td>
<td>Severe</td>
<td>Likely</td>
<td></td>
</tr>
<tr>
<td>Neighbouring property spraying</td>
<td>Pesticide drift onto native vegetation</td>
<td>Disastrous/Severe</td>
<td>Medium/High</td>
<td>Likely/Unlikely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Clearing for fence replacement</td>
<td>Excessive or inappropriate method</td>
<td>Severe/Major</td>
<td>Likely</td>
<td>Medium/High</td>
<td></td>
</tr>
<tr>
<td>Clearing for new driveways</td>
<td>Excessive or poorly located</td>
<td>Minor/Major</td>
<td>Likely/Unlikely</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Weed populations on neighbouring property</td>
<td>Invasion into roadside vegetation</td>
<td>Minor/Major</td>
<td>Virtually certain</td>
<td>Medium/High</td>
<td></td>
</tr>
<tr>
<td>Seed harvesting</td>
<td>Excessive or damaging to native vegetation</td>
<td>Destruction or damage to native plants</td>
<td>Unlikely</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Firewood collecting</td>
<td>Firewood collection is prohibited – illegal collection, vehicular damage to surrounding vegetation</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Disposal of rubbish and waste materials</td>
<td>Illegal dumping, smothering or vehicular damage to surrounding vegetation, weed infestation from dumped garden refuse or soil</td>
<td>Minor/Major</td>
<td>Likely/Certain</td>
<td>Medium/High</td>
<td></td>
</tr>
<tr>
<td>Weed control</td>
<td>Inappropriate or insensitive methods</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Vermin control</td>
<td>Inappropriate or insensitive methods</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Unlikely</td>
<td>Medium</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Activity</th>
<th>Hazard</th>
<th>Consequence</th>
<th>Severity</th>
<th>Likelihood</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>New road construction (realignments, widening)</td>
<td>Poorly designed</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely/Unlikely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Roadwork activity (eg stockpiles, turning areas)</td>
<td>Poorly managed</td>
<td>Destruction or damage to native plants (smothering or physical damage)</td>
<td>Minor/Major</td>
<td>Likely/Unlikely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Vegetation control for sight distance</td>
<td>Inappropriate methods</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely/Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td>Drain clearing</td>
<td>Excessive or inappropriate disposal of drain spoil</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely/Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td>Service installation</td>
<td>Installation of services where cleared land exists elsewhere</td>
<td>Destruction or damage to native plants</td>
<td>Severe/Major</td>
<td>Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td>Service maintenance</td>
<td>Insensitive methods used to maintain services</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Unlikely</td>
<td>Low</td>
</tr>
<tr>
<td>Planting</td>
<td>Placement within intact native vegetation (e.g. trees in native grassland)</td>
<td>Destruction or damage to locally occurring native plant communities</td>
<td>Minor</td>
<td>Unlikely</td>
<td>Low</td>
</tr>
<tr>
<td>Grazing by stock</td>
<td>Grazing or trampling of roadside vegetation, soil erosion, excessive nutrient input</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Grazing by rabbits</td>
<td>Grazing of roadside or regenerating vegetation, soil erosion</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium</td>
</tr>
<tr>
<td>Off-road vehicles</td>
<td>Damage to vegetation, soil erosion spread of plant diseases</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Plant disease (e.g. Phytophthora, Mundulla Yellows)</td>
<td>spread of disease</td>
<td>Destruction or damage to native plants</td>
<td>Major/Severe</td>
<td>Likely/Certain</td>
<td>High</td>
</tr>
<tr>
<td>Activity</td>
<td>Hazard</td>
<td>Consequence</td>
<td>Severity</td>
<td>Likelihood</td>
<td>Risk</td>
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</tr>
<tr>
<td><strong>Fire regimes</strong></td>
<td>Inappropriate regime may damage plant communities, risk of fire escape</td>
<td>Destruction or damage to native plants</td>
<td>Disastrous/Severe</td>
<td>Likely</td>
<td>High</td>
</tr>
<tr>
<td><strong>Inappropriate fire prevention methods</strong></td>
<td>Damage to roadside vegetation from actions like spraying slashing</td>
<td>Destruction or damage to native plants</td>
<td>Major/Severe</td>
<td>Likely</td>
<td>Medium/High</td>
</tr>
<tr>
<td><strong>Changes to hydrology</strong></td>
<td>Erosion, spread of weed seed, change to soil moisture regime</td>
<td>Destruction or damage to native plants, change in species composition</td>
<td>Minor/Major</td>
<td>Unlikely</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Dryland salinity</strong></td>
<td>Dieback, change in vegetation to more salt tolerant species</td>
<td>Destruction or damage to native plants, change in species composition</td>
<td>Major/Severe</td>
<td>Likely</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Lack of active management</strong></td>
<td>Pest plant or animal invasion</td>
<td>Destruction or damage to native plants</td>
<td>Minor/Major</td>
<td>Unlikely</td>
<td>Medium</td>
</tr>
</tbody>
</table>


5.5 Requirements for Service Authorities

Any external codes of practice for service industries must be followed as well as adhering to the guidelines in the RVMP. The approval process for service installation proposals or conditions of access for repair or maintenance will be assessed from a Job Environmental Analysis (JEA) that must be completed for each project or activity.
5.6 Training and Education

It is important that all staff and councillors are aware of the RVMP and the requirements and responsibilities of each individual.

Staff involved in activities that may cause damage to vegetation will be trained in the use and requirements of the RVMP by an external training provider. Staff required to undertake training will include:

- All Maintenance and Construction workers;
- Parks and Garden staff;
- Operations Managers and Coordinators.

Training will involve a thorough explanation of the RVMP and its use including field demonstrations and classroom time.

For new staff an explanation of the RVMP and its use will be included in the normal employee induction procedure.

As community involvement in roadside vegetation conservation is particularly important council will encourage community groups and individuals to become familiar with the RVMP. Copies will be made available on the council web sites, Libraries, the Normanville Catchment Resource Centre and the Victor Harbor Natural Resource Centre.

District Council of Yankalilla; www.yankalilla.sa.gov.au

City of Victor Harbor; www.victor.sa.gov.au
5.7 Specific Activity Procedures

This section outlines the operating standards procedures that will support the effective operation of the RVMP.

Operating standards for vegetation protection should be included in procedures or instructions (e.g., work orders, construction management plans, standard operating procedures or permits) for any activity, or decision-making process, that may affect roadside vegetation including:

- road maintenance (e.g., patrol grading, vegetation trimming);
- minor road construction (e.g., re-sheeting, intersection upgrades, minor widening);
- proclaimed animal and plant control;
- applications for grazing;
- applications to crop;
- fire-hazard reduction/fire-break construction;
- applications for seed or wood collection;
- installation of services (e.g., gas, water, electricity, telecommunications).

Examples of standards for vegetation protection can be found in the following publications:

- Environmental Practices for Rural Sealed and Unsealed Roads (ARRB Transport Research, 2001); and

Other procedures that assist in the implementation of the RVMP are included here such as:

- Permit application forms (e.g., for removal of seed, flowers, wood, vegetation from road reserves);
- Environmental Code of Practice for activities undertaken on roadsides;
- Job Environmental Analysis (JEA) forms (for proposed roadworks);
- Environmental checklist for roadworks in progress;
- Roadside Vegetation Management Matrix Table 4.5.
5.8 Code of Practice & Forms - for works allowed under this RVMP

This section is to be considered in conjunction with the Management Guidelines, and not be read on its own. For each of the Codes of Practice, also follow the guidelines in the RVMP for each activity.

**Environmental Code of Practice for Road Maintenance Activities (eg patrol grading, vegetation trimming).**
1. Protect native vegetation and natural regeneration.
2. Avoid working where root damage and soil compaction may occur.
3. Only use herbicides where control of vegetation by mechanical methods is inappropriate. Avoid over-spray by not spraying in windy conditions.
4. Avoid “cleaning up” vegetation. Retain stumps, dead wood and understorey where possible.
5. Remove drain spoil and dispose of appropriately.
6. Locate stockpiles, turn-out or lay-down areas on existing cleared land.
7. Carefully prune trees using low impact methods.
8. Avoid damaging undergrowth when removing trees.
9. Only use the appropriate type and minimum size of machinery for the job.
10. Only use soil or fill from a weed or disease free site.
11. Control erosion:
   - Remove as little vegetation as possible and encourage growth of native vegetation on batters;
   - Maintain drainage systems;
   - Minimise soil disturbance.
12. Clean down machinery in appropriate areas before entering and when leaving work site.
13. Dispose of waste materials at an appropriate site or depot.
14. If unsure about any environmental controls, contact the site supervisor.
15. Refer to Management Guidelines for Road Maintenance (Section 3.3).

**Environmental Code of Practice for Road Construction Activities (eg re-sheeting, intersection upgrades minor widening).**
1. Clearly mark the limits of stripping and all other construction zones.
2. Always stay within the construction zone.
3. Keep machinery and stockpiles on previously cleared land.
4. Protect native vegetation and natural regeneration.
5. Plan vegetation removal (do not clear unnecessarily).
6. Only use the appropriate type and minimum size of machinery for the job.
7. Chip light material from tree removal and use as mulch to spread local seed.
8. If there is no alternative to burning, do not burn close to desirable vegetation.
9. Strip and stockpile topsoil from areas of good native vegetation. Re-use as soon as possible.
10. Control erosion:
• remove as little vegetation as possible and encourage the growth of native vegetation on batters;
• leave batters roughened to hold the soil and encourage regrowth;
• limit access and earthworks to the area required for construction;
• establish adequate drainage systems.

11. Avoid “cleaning up” vegetation after construction. Retain stumps, dead wood and understorey where possible.

12. Clean down machinery before leaving work site.

13. If unsure about any environmental controls, contact the site supervisor.

14. Refer to Management Guidelines for Road Construction (Section 3.2)

**Environmental Code of Practice for Verge Clearing for Sight Distance**

1. Ensure clearance envelopes are maintained to the specifications in Section 2.4 of the Southern Fleurieu RVMP
2. Always keep machinery and personnel within the road formation zone.
3. Keep machinery and stockpiles on previously cleared land.
4. Protect native vegetation and natural regeneration.
5. Plan vegetation removal (do not clear unnecessarily).
6. Only use the appropriate type and minimum size of machinery for the job.
7. Chip light material from tree removal and use as mulch to spread local seed. (only use material for mulch if known not to contain weed seed or weedy propagative material).
8. Retain stumps, dead wood and understorey where possible.
9. Clean down machinery before leaving work site.
10. If unsure about any environmental controls, contact the site supervisor.
11. Carefully prune trees using low impact methods.
12. Avoid damaging undergrowth when removing trees.
13. Refer to Management Guidelines for Verge Maintenance for Road Safety (Section 3.4)

**Environmental Code of Practice for the Installation and Maintenance of Services.**

1. Clearly mark the limits of stripping and all other construction zones.
2. Always stay within the construction zone.
3. Keep machinery and stockpiles on previously cleared land.
4. Protect native vegetation and natural regeneration.
5. Plan vegetation removal (do not clear unnecessarily).
6. Only use the appropriate type and minimum size of machinery for the job.
7. Chip light material from tree removal and use as mulch to spread local seed.
8. Locate soil stockpiles containing listed weed seed bank in most degraded area.
9. Strip and stockpile topsoil from areas of good native vegetation. Re-use as soon as possible.
10. Control erosion:
   - remove as little vegetation as possible and encourage the growth of native vegetation on batters;
   - leave batters roughened to hold the soil and encourage regrowth;
• limit access and earthworks to the area required for construction;
• establish adequate drainage systems.

11. Avoid “cleaning up” vegetation after construction. Retain stumps, dead wood and understorey where possible.
12. Clean down machinery before leaving work site.
13. Protect native vegetation and natural regeneration.
14. Avoid working where root damage and soil compaction may occur.
15. If unsure about any environmental controls, contact the site supervisor.
16. Refer to Management Guidelines for Installation and Maintenance of Services (Section 3.5).

**Environmental Code of Practice for Pest Plant and Animal Control.**
1. Protect native vegetation and natural regeneration.
2. Avoid working where root damage and soil compaction may occur.
3. Avoid “cleaning up” vegetation. Retain stumps, dead wood and understorey where possible.
4. Plan vegetation removal (do not clear unnecessarily).
5. Carefully prune trees using low impact methods.
6. Avoid damaging undergrowth when removing woody weeds.
7. Only use the appropriate type and minimum size of machinery for the job.
8. Avoid off-target damage to native plants during spray operations.
9. Avoid trampling or vehicle damage to native plants.
10. Avoid smothering of native plants with other plant materials.
11. Do not remove woody weeds that contain viable seeds.
12. Carefully remove weedy plant materials that may self propagate vegetatively.
13. Observe equipment hygiene procedures to avoid the transfer of weeds.
14. If unsure about any environmental controls, contact the site supervisor.
15. Refer to Management Guidelines for Pest Plant and Pest Animal Control (Section 3.6).

**Environmental Code of Practice for Bushfire Hazard Reduction**
1. Protect native vegetation and natural regeneration.
2. Avoid working where root damage and soil compaction may occur.
3. Avoid “cleaning up” vegetation. Retain stumps, dead wood and understorey where possible.
4. Only use the appropriate type and minimum size of machinery for the job.
5. Observe equipment hygiene procedures to avoid the transfer of weeds.
6. Inspect sites prior to slashing or spraying to determine the native species composition and determine appropriate methods.
7. If unsure about any environmental controls, contact the site supervisor.
8. Refer to Management Guidelines for Bushfire Hazard Reduction (Section 3.10)

**Environmental Code of Practice for Grazing of Roadsides**
1. Under the Native Vegetation Act 1991 and associated Guidelines for the Management of Roadside vegetation (July 1997), clearance approval is required from the Native Vegetation Council for any grazing (other than associated with droving), likely to cause damage to native roadside vegetation.

This includes roadsides where:
- Native shrub and understorey species are present; and
- there is evidence of recent or periodic regeneration of native plant species;
- Grazing should only be permitted on Category 3, 4, or 5 roadsides to reduce exotic grass litter.

2. Advise all landowners that permission to graze stock on any roadside requires the permission of the District Council of Yankalilla or the City of Victor Harbor and the Native Vegetation Council.

3. Refer to Management Guidelines for Grazing of Roadsides (Section 3.11).

Environmental Code of Practice for Collection of seed and propagating material
1. Always source propagating material from the nearest suitable location to the revegetation site.
2. Collect mainly basic colonising and structural species, appropriate for the vegetation community.
3. It is not practical and may be a waste of resources to consider revegetating by introducing a diverse range of species from all structural layers of vegetation.
4. Both the local Council permit and DENR permit must be carried at all times whilst collecting and must be shown upon request.
5. Any threatened plant which is protected (listed specifically in regulations) under the National Parks and Wildlife Act 1972 will also require a separate permit from the Department for Environment. Threatened species or habitats are not to be collected from without express permission under the National Parks and Wildlife Act regulations.
6. Details of the local project, target species, estimated quantities of propagating material, and collection sites must be provided prior to permission being granted by Council.
7. Collectors should conform with the requirements of the Occupational Health Safety and Welfare Act 1986 (including the wearing of relevant safety gear such as safety vests and sun hats; and maintaining a current and accessible first aid kit at all times) and shall ensure non-interference with safe movement of road traffic. Use adequate signage and safety vests, when working adjacent to an open public roadway. Collectors are responsible for implementing their own OH&S standards.
8. Council accepts no liability / responsibility for any loss, damage or accident incurred by collectors.
9. No plant material may be collected from sites marked by the Roadside Marker System without Council approval.
10. Collectors must be responsible and professional collecting only what is approved and required for the designated project.
11. Plant material is only to be collected from plants positively identified. If unsure no collection is to take place.
12. **Plant recognition and identification aids** are to be carried in vehicles to confirm species identification.

13. **Ensure that fruits are mature** and pods are ripe when collecting seed. Many pods change from green to a brown-grey or they may split when ripe.

14. **Where seed is retained on a plant** it should be at least twelve months old before collection.

15. **Observe when shrubs and trees are in flower** to better prepare your collection timetable.

16. **Do not** over nor repeatedly collect from any site or population.

17. **Collection from solitary plants is discouraged.** Avoid collecting from solitary plants and concentrate on stands or groups of plants.

18. **Collect only from healthy plants** (having neighbours within 20 metres); and from a spread of at least five (5) plants of the same species spread at least 100m apart over each site nominated.

19. **Do not** take all cutting or seed material from one plant. Move between plants of the same species.

20. **Collect from** all sections of the plant, not just a few side or low branches.

21. **All cuts** shall be conservative and not too injurious to the plant.

22. **No limbs greater than 10mm diameter** will be removed.

23. **Capsules and fruit shall be cut** to minimise removal of other plant parts.

24. **No more than 20% (or 1% of above-ground biomass)** of the propagating material shall be removed from any one plant.

25. **Adequate precautions will be taken** to ensure minimal track damage from vehicles or foot traffic.

26. **Vehicles shall not be driven** off existing tracks or roads.

27. **Gates will be left as found.**

28. **Take due care to collect in the most environmentally sensitive manner** to avoid trampling adjacent plants including low shrubs, herbs and ground covers such as grasses, reeds, ferns, moss and lichens.

29. **Use appropriate equipment** to avoid damage to plants, adequately supervise groups and use judicious cuts.

30. **Avoid collection on fire ban days** and under strong windy conditions.

31. **All nesting sites, tree hollows and other habitat** is to be left undisturbed.

32. **Minimise the spread of** known weeds, diseased plant material and pathogens such as Phytophthora when moving between plant populations.

33. **Weed seeds and fungal spore** transport will be adequately managed from one site to another on equipment, vehicles, clothing and footwear: by cleaning equipment, machinery and footwear before and after working in an area. (Cleaning shall include soil removal and sterilising treatment where appropriate).

34. **Material harvested in excess of requirements** shall be dispersed on site or along road reserves nearby.

35. **Batches of seeds shall be labelled** with collector name, species, location, weight and a grid reference or other clear reference denoting the location of the collection site.

36. **Store all seed collected** in a cool, dark and dry location in sealed containers.

37. Refer to Management Guidelines for Removal of Plant Material (Section 3.15)

**Environmental code of practice for Movement of stock on roadsides**
1. If the livestock owner can **demonstrate that no alternative is available**. The movement of livestock from one property or paddock to another as part of normal farm management may be permitted.

2. **Where routes coincide with significant environmental areas** (Category 1 & 2) the owner of the stock and land should be contacted, to ensure that **special care is taken to prevent adverse effects to these areas**. If possible, **alternative routes along roads of lower conservation significance** should be used.

3. Where **indigenous vegetation may be disturbed**, all possible alternative routes should be explored, and alternatives such as funding sources to help fence roadsides pursued.

4. **Where routes pass through areas of significant vegetation** (Category 1 and 2 Roads, Rare, Threatened or Significant Species, Strategic Wildlife Corridors, or other listed sites) an inspection will occur on an annual basis, to determine if damage to native vegetation has occurred. If so, the owner of the stock or land will be contacted to consider strategies to prevent the damage (e.g. fencing or the use of alternative routes).

5. **Refer to Management Guidelines for ‘Movement of Stock on Roadsides’** (Section 3.12 page 83).

**Standard Operating Procedure to manage the activity of staff, contractors and others involved in pest plant and pest animal control programs.**

1. The clearance of native vegetation during programs for control of proclaimed animals and plants should be avoided or minimised (in accordance with advice from the local NRM Authorised Officer or NRM Board) and must be in accordance with these procedures.

2. Pruning of Native Vegetation. The pruning of native vegetation, if essential to provide access for pest animal and plant control, is acceptable provided that it is kept to a minimum and does not result in the death of the plant(s) involved.

3. Weed Control in Native Roadside Vegetation. Proclaimed Plant control by landholders, contractors or others in Category 1 or Category 2 vegetation (i.e. sites marked with blue vegetation markers) must be conducted by bush for life or minimal disturbance methods only. See section 6.2 for details of the roadside marker scheme and section 2.17 Protection of Vegetation of High Conservation Significance for details on minimal disturbance or bush for life weed control methods.

Spraying of proclaimed plants in native vegetation on Category 3, 4 and 5 roadsides is acceptable provided that a careful and selective approach is used (e.g. spot-spraying) and damage to nearby native vegetation is avoided. The cover spraying of large shrubs (e.g. boxthorn) within areas of intact native vegetation should be avoided due to the high risk of off-target damage. Other, lower risk methods, such as cut and swab or drill and inject, should be considered. The use of herbicides must be in strict accordance with NRM advice and with instructions for use provided by the manufacturer.

Any broader spraying program in native vegetation (e.g. boom-spraying) requires the endorsement of the District Council the Biodiversity Assessment Section or Native Vegetation Council Secretariat, DWLBC, and may require the consent of the Native Vegetation Council through a clearance application.
4. **Removal of Entire Native Plants.** The removal of entire native plants (if considered essential to facilitate animal and plant control) must be discussed with and endorsed by the Biodiversity Assessment Services Section or Native Vegetation Council Secretariat, DWLBC.

This consultation can take one of two main forms:

(a) **Case-by-case consultation**

Minor clearance of native species known to be common in a district may be resolved through verbal or electronic communication without the need for site assessment by DWLBC staff. For larger scale clearance, or for cases where the identity of the native plants is unclear, a site inspection will usually be undertaken.

**NOTES:**
1. In this situation, either the landholder undertaking the work or the authorised NRM Authorised Officer should initiate the consultation by contacting the Native Vegetation Council Secretariat.

Whether a proposed clearance is “minor” (and therefore not warranting a site inspection) will be determined through discussion between the DWLBC officer and the landholder / authorised officer. As a guide, the clearance of up to 10 kangaroo thorn (Acacia paradoxa) for rabbit control, or up to 10 square metres of a common species of Wallaby grass (Danthonia sp.) for bridal veil control could be regarded as “minor”.

Where minor clearance is agreed without a DWLBC inspection, it will be recorded on the appropriate DWLBC file. Where an inspection is undertaken, the landholder / authorised officer is to be advised of DWLBC endorsement in writing.

If, as a result of the above consultation, the Biodiversity Assessment Section or Native Vegetation Council Secretariat determines that a clearance proposal is of particular environmental significance or sensitivity, the proposal is to be referred as a clearance application to the Native Vegetation Council for decision. This may occur, for example, where a substantial area of native vegetation is involved, or where the clearance involves plant species of particular conservation significance.

(b) **Consultation based upon a broader planning approach**

Broader planning arrangements may be developed between NRM Boards/Authorised Officers and DWLBC.

For example, it may be agreed that certain methods will be applied within a Board district for control of pests often associated with particular native species - such as gorse or rabbits associated with remnant vegetation, or rabbits associated with Banksia-heath vegetation. This would be in the form of a Standard Operating Procedure or a Management Plan initiated by the local board and prepared in consultation with the Native Vegetation Council Secretariat. Once endorsed by the Native Vegetation Council, the plan could be put into effect and the need for consultation with the Secretariat about each program would be avoided.

It is envisaged that plans of this type would normally be prepared on a Board basis. However, there may be issues and management approaches of State-wide relevance, in
which a State-wide management plan could be prepared, presumably at the initiation of the NRM Commission.

5. The control of proclaimed animals and plants in native vegetation should also take the following factors into account:

- the removal of tree saplings or more mature trees is not normally necessary for pest control;
- very localised pest control issues might be manageable with hand-held equipment rather than heavier machinery which could have greater environmental impact;
- the control method used should ensure that the target weed is readily replaced by a native plant rather than another weed (off-target damage often increases the likelihood of further weed invasion);
- the driving of a vehicle in intact native vegetation will cause damage and therefore is to be avoided (equipment should be carried in);
- there is an increasing range of pest control equipment available, some of which has less environmental impact than the equipment used more traditionally;
- any control method involving soil disturbance has the potential to promote further establishment of proclaimed plants or other introduced plants which may disrupt the ecology of the native vegetation: Soil disturbance must be minimised and control works should be followed with site monitoring and selective eradication of any introduced plants which re-establish;
- fire has some potential for inclusion in pest control programs in native vegetation to improve access, reduce the bulk of proclaimed plants, and possibly to promote the regeneration of native species: however, the issues associated with fire can be complex and any such burning in native vegetation must be discussed with DWLBC.
Application to Collect Native Plant Materials from Council Land

Attention: Works and Infrastructure Manager

Date: …………………

Applicant Contact Details

Name: ……………………………………………………………………………………………………………………………………………………….

Company name (if applicable): …………………………………………………………………………………………………………………

Vehicle Registration: …………………………………………………………………………………………………………………

Address: ……………………………………………………………………………………………………………………………………………..

Suburb/Town: ……………………………………… Postcode:

Phone: ………………………………………………………………………………………………………………………………………

Mobile: ………………………………………………………………………………………………………………………………………

Fax: ……………………………………………………………………………………………………………………………………………

E-mail: ………………………………………………………………………………………………………………………………………

Permit Details

Why do you wish to collect these native plant materials?

☐ COMMERCIAL

☐ sale of seed

☐ propagation and sale of plants

☐ revegetation

☐ collection of seed/fruit for consumptive use (eg. restaurant trade, cottage industry)

☐ other (please specify) …………………………………………………………………………………………………………………

…………………………………………………………………………………………………………………………………………………….

…………………………………………………………………………………………………………………………………………………….
☐ NON COMMERCIAL (REVEGETATION)

☐ National Parks and Wildlife friends group

Name of Park........................................................................................................................................................................

Name of NP&W Ranger .............................................................................................................................................................

Description of project..............................................................................................................................................................

☐ other community based project *(please provide details)*

................................................................................................................................................................................................

☐ other *(please provide details)*

................................................................................................................................................................................................

Project methodology of revegetation: ☐ Tubestock ☐ Direct Seeding

Description of project and its purpose

................................................................................................................................................................................................

................................................................................................................................................................................................

................................................................................................................................................................................................

What training and experience have you had in the collection of native plant materials? Please provide information on any training courses and workshops attended and copy of your completion certification.

I, the applicant (undersigned) agree to indemnify and keep indemnified the Council, its servants and agents and each of them from and against all actions, costs, claims, damages, charges and expenses whatsoever which may be brought or made or claimed against them or any of them arising out of or in relation to the issuing of the permit or any activity associated with the collection of native plant materials from council managed land.

Date:.......................................... Signature:..............................................................
**Southern Fleurieu Peninsula Roadside Vegetation Management Plan**

Please complete and forward to Council for consideration for access to Council land. Council will then forward to Dept. for environment and heritage who control what plant species and quantity may be collected.

**District Council of Yankalilla**

**Species of Plant, Location and Quantity of Native Plant Material to be Collected**

<table>
<thead>
<tr>
<th>Species of Plant (Botanical Name)</th>
<th>Location (As detailed as possible)</th>
<th>GPS Co-ordinates (Desirable)</th>
<th>Parts to Be Taken (Leaves, flowers, fruits, seeds, rhizomes, tubers, bulbs, whole plants)</th>
<th>Quantity (Number, grams or kilograms)</th>
<th>Approved Yes</th>
<th>Approved No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bursaria spinosa</td>
<td>Kemiss Hill Rd (east)</td>
<td>Fruits and seeds</td>
<td>20 grams</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name of Applicant: ___________________  Signature of Applicant: _________________

Date: ___________________

Name of Works and Infrastructure Manager: _________________  Signature of Works and Infrastructure Manager: _________________

Date: ___________________
Application to Collect Native Plant Materials From Council Land

Attention:  Manager Environment & Recreation

Date:…………………

Applicant Contact Details

Name: ……………………………………………………………………………………………………………………………………………………………

Company name (if applicable): ……………………………………………………………………………………………………………………………

Vehicle Registration: ……………………………………………………………

Address: ……………………………………………………………………………………………………………………………………………………………

Suburb/Town: …………………………………..Postcode: ………

Phone: ……………………………………………………………

Mobile: ……………………………………………………………

Fax: ……………………………………………………………

E-mail: ……………………………………………………………

Permit Details

Why do you wish to collect these native plant materials?

☐ COMMERCIAL

☐ sale of seed

☐ propagation and sale of plants

☐ revegetation

☐ collection of seed/fruit for consumptive use (eg. restaurant trade, cottage industry)

☐ other (please specify) ……………………………………………………………………………………………………………………………

…………………………………………………………………………………………………………………………………………………………
☐ NON COMMERCIAL (REVEGETATION)

☐ National Parks and Wildlife friends group

Name of Park..............................................................................................................................................

Name of NP&W Ranger ............................................................................................................................... 

Description of project................................................................................................................................

........................................................................................................................................................................

☐ other community based project *(please provide details)*

........................................................................................................................................................................

........................................................................................................................................................................

☐ other *(please provide details)*

........................................................................................................................................................................

........................................................................................................................................................................

Project methodology of revegetation: ☐ Tubestock ☐ Direct Seeding

Description of project and its purpose

........................................................................................................................................................................

........................................................................................................................................................................

........................................................................................................................................................................

What training and experience have you had in the collection of native plant materials? Please provide information on any training courses and workshops attended and copy of your completion certification.

I, the applicant (undersigned) agree to indemnify and keep indemnified the Council, its servants and agents and each of them from and against all actions, costs, claims, damages, charges and expenses whatsoever which may be brought or made or claimed against them or any of them arising out of or in relation to the issuing of the permit or any activity associated with the collection of native plant materials from council managed land.

Date:.................................. Signature:..................................................
PLEASE COMPLETE AND FORWARD TO COUNCIL FOR CONSIDERATION FOR ACCESS TO COUNCIL LAND. COUNCIL WILL THEN FORWARD TO DEPT. FOR ENVIRONMENT AND HERITAGE WHO CONTROL WHAT PLANT SPECIES AND QUANTITY MAY BE COLLECTED.

CITY OF VICTOR HARBOR

<table>
<thead>
<tr>
<th>SPECIES OF PLANT</th>
<th>LOCATION</th>
<th>GPS CO-ORDINATES</th>
<th>PARTS TO BE TAKEN</th>
<th>QUANTITY</th>
<th>APPROVED</th>
<th>APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botanical Name</td>
<td>As detailed as possible</td>
<td>(desirable)</td>
<td>(leaves, flowers, fruits, seeds, rhizomes, tubers bulbs, whole plants)</td>
<td>Number, grams or kilograms</td>
<td>(Council use only)</td>
<td>(Council Use only)</td>
</tr>
<tr>
<td>Bursaria spinosa</td>
<td>Swains Crossing Rd (south)</td>
<td></td>
<td>Fruits and seeds</td>
<td>20 grams</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name of Applicant: ______________________  Signature of Applicant: ______________________

Date: ______

Name of Manager Environment & Recreation: ____________________  Signature of Manager of Environment & Recreation: ____________________

Date: ______
Checklists – Job Environmental Analysis

Regardless of the size of the task or project, a checklist is a useful tool for ensuring that the appropriate steps for assessing the risk of damage to roadside vegetation are undertaken. A **Job Environmental Analysis (JEA)** can be used as a routine measure prior to undertaking a particular job or task, particularly where there is considered to be some risk of damaging native vegetation.

The JEA approach is based on the “Job Safety Analysis”, a common industry practice. It enables actions to avoid or reduce risk of native vegetation damage to be determined based on the identified risks of the job.

This checklist deals with the three stages of a task or project; planning, undertaking and completion. Completed checklists can be used as a sign-off tool for a job or major project by the Works Manager and can also be included in Council's RVMP annual report to NVC as a record of activities, substantiation of due diligence and evidence of implementation of the RVMP. They may also be useful to the Works Manager for internal performance reporting.
## Job Environmental Analysis (JEA) Checklist for high impact or high risk projects.

### Job Type

<table>
<thead>
<tr>
<th>4</th>
<th>Job Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadworks - Construction</td>
<td></td>
</tr>
<tr>
<td>Roadworks - Maintenance</td>
<td></td>
</tr>
<tr>
<td>Service Install/Maintenance</td>
<td></td>
</tr>
<tr>
<td>Animal &amp; Plant Control</td>
<td></td>
</tr>
<tr>
<td>Revegetation/Rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

### Location

- **Road Name:**
- **Section:**
- **Road Number:**
- **Length (km):**
- **From:**
- **To:**

### Project Manager/Supervisor:

### Department/Contractor undertaking work:

### Start Date:  

### Finish Date:  

### PLANNING

<table>
<thead>
<tr>
<th>4</th>
<th>Action / Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will there be any deviation from the existing alignment?</td>
<td></td>
</tr>
<tr>
<td>Will the road formation be widened?</td>
<td></td>
</tr>
<tr>
<td>- Will the new alignment and cross-section alter the existing safety Clearance Envelope for vegetation?</td>
<td></td>
</tr>
<tr>
<td>Will the new alignment and cross-section alter the existing safety Clearance Envelope for vegetation?</td>
<td></td>
</tr>
<tr>
<td>Will services need relocation?</td>
<td></td>
</tr>
<tr>
<td>Does the site have any roadside vegetation?</td>
<td></td>
</tr>
<tr>
<td>Does adjacent land have any native vegetation?</td>
<td></td>
</tr>
<tr>
<td>Is any native vegetation clearance required?</td>
<td></td>
</tr>
<tr>
<td>What is its conservation value / management category?</td>
<td></td>
</tr>
<tr>
<td>Is vegetation clearance consistent with RVMP?</td>
<td></td>
</tr>
<tr>
<td>Are there any rare or threatened species present?</td>
<td></td>
</tr>
<tr>
<td>What native vegetation protection is required?</td>
<td></td>
</tr>
<tr>
<td>What approval for vegetation clearance is required?</td>
<td></td>
</tr>
<tr>
<td>Are there any special restrictions or requirements for undertaking work in this area?</td>
<td></td>
</tr>
<tr>
<td>Has the area of vegetation disturbance been identified and marked on site?</td>
<td></td>
</tr>
<tr>
<td>Are there any proclaimed weed species present?</td>
<td></td>
</tr>
<tr>
<td>- What control is required?</td>
<td></td>
</tr>
<tr>
<td>Are weed or disease control measures required in this area (ie. vehicle hygiene requirements)</td>
<td></td>
</tr>
<tr>
<td>Are there any proclaimed animal species present?</td>
<td></td>
</tr>
<tr>
<td>- What control is required?</td>
<td></td>
</tr>
<tr>
<td>Action / Quantity</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Are vehicle turnouts required?</td>
<td></td>
</tr>
<tr>
<td>• Have suitable vehicle turnouts sites been identified?</td>
<td></td>
</tr>
<tr>
<td>Is any stripping of vegetation and topsoil required?</td>
<td></td>
</tr>
<tr>
<td>Are stockpile or staging areas required?</td>
<td></td>
</tr>
<tr>
<td>• Have suitable stockpile or staging areas been identified?</td>
<td></td>
</tr>
<tr>
<td>Is there a natural watercourse in the vicinity?</td>
<td></td>
</tr>
<tr>
<td>• What protection is required?</td>
<td></td>
</tr>
<tr>
<td>Will this activity result in the alteration to drainage?</td>
<td></td>
</tr>
<tr>
<td>• Have alterations to drainage been considered?</td>
<td></td>
</tr>
<tr>
<td>• Have the appropriate steps been taken to minimise the impact of drainage alterations on roadside vegetation?</td>
<td></td>
</tr>
<tr>
<td>• Have appropriate spoil management practices been chosen to minimise vegetation disturbance?</td>
<td></td>
</tr>
<tr>
<td>Will this activity result in the generation of sediment?</td>
<td></td>
</tr>
<tr>
<td>• Have the appropriate steps been taken to minimise the impact of sedimentation on roadside vegetation?</td>
<td></td>
</tr>
<tr>
<td>Are traffic management measures required?</td>
<td></td>
</tr>
<tr>
<td>• Will they impact roadside vegetation?</td>
<td></td>
</tr>
<tr>
<td>• Have the appropriate steps been taken to minimise the impact on roadside vegetation?</td>
<td></td>
</tr>
<tr>
<td>Is any extraction of raw material (eg. fill, gravel, water) required?</td>
<td></td>
</tr>
<tr>
<td>Have all project personnel (including contractors) received the appropriate environmental training for the task?</td>
<td></td>
</tr>
<tr>
<td>Are rehabilitation or revegetation measures required?</td>
<td></td>
</tr>
<tr>
<td><strong>UNDERTAKING TASK</strong></td>
<td></td>
</tr>
<tr>
<td>Has the task footprint or activity zone been identified or marked on site?</td>
<td></td>
</tr>
<tr>
<td>Have significant vegetation sites with a buffer area (25m) been flagged off to prevent disturbance?</td>
<td></td>
</tr>
<tr>
<td>Are adequate vehicle hygiene practices being followed?</td>
<td></td>
</tr>
<tr>
<td>Are weather conditions being taken into account when undertaking specific activities (eg. spraying, grading)?</td>
<td></td>
</tr>
<tr>
<td><strong>TASK COMPLETION AND ASSESSMENT</strong></td>
<td></td>
</tr>
<tr>
<td>Were any areas outside the activity zone cleared?</td>
<td></td>
</tr>
<tr>
<td>Were the designated vehicle turnouts/stockpile sites used?</td>
<td></td>
</tr>
<tr>
<td>Were appropriate vehicle hygiene practices followed?</td>
<td></td>
</tr>
<tr>
<td>Was the impact of drainage alterations on roadside vegetation kept to a minimum?</td>
<td></td>
</tr>
<tr>
<td>Was the impact of sedimentation on roadside vegetation kept to a minimum?</td>
<td></td>
</tr>
<tr>
<td>Have appropriate site clean-up or rehabilitation activities been carried out?</td>
<td></td>
</tr>
</tbody>
</table>

**Checklist completed by:**

**Position/Title:**
<table>
<thead>
<tr>
<th>Date:</th>
<th>Approved</th>
<th>Not Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.9 Vegetation Assessment and Approval

The following table describes the process for assessing clearance proposals and determining the level of approval required. It enables criteria to be established to determine what assessment is required and when referral to the Native Vegetation Council (NVC) may be necessary.

The Job Environmental Analysis (JEA) checklist (see page 147 to 149) will be used to assist Council in determining the level of assessment required for an activity such as road construction at the early planning stage of the project.

Responsibility for the processing of clearance applications, including the initial assessment of the application will be carried out by councils officer responsible for Natural Resources and the Works Manager. If clearance standards fall within the RVMP, applications will be assessed internally otherwise referral will be made to the NVC, (Refer to “Vegetation Assessment and Approval” Table 5.4, page 151).

Preliminary advice on a clearance application may be sought from the NVC Secretariat or Native Vegetation and Biodiversity Management Unit, DWLBC.

Data collection for a clearance application may be undertaken by one of the following:

- a Council employee accredited by the Native Vegetation Council;
- a Botanical Consultant accredited by the Native Vegetation Council;
- Native Vegetation and Biodiversity Management Unit, DWLBC.

Any application to clear native vegetation is assessed against the Principles of Clearance in Schedule 1 of the Native Vegetation Act 1991.
Table 5.4. Vegetation Assessment and Approval

<table>
<thead>
<tr>
<th>Activity</th>
<th>Assessment / approval requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>None</strong></td>
<td><em>Minor clearance as defined in the endorsed RVMP such as: Clearing existing open drains (e.g. turn-outs); vegetation control at intersections &amp; driveways; new roadside turning or temporary storage areas for mobile plant?</em></td>
</tr>
<tr>
<td></td>
<td>Any clearance outside NVC approved “maintenance envelope”. e.g. construction of new open drains; new stockpiles or work areas outside approved “maintenance envelope”; other maintenance requiring increased clearance or use of high impact methods</td>
</tr>
<tr>
<td></td>
<td><strong>Internal</strong></td>
</tr>
<tr>
<td></td>
<td>If all work occurs within NVC approved “maintenance envelope”</td>
</tr>
<tr>
<td></td>
<td><em>Minor clearance as defined in the endorsed RVMP such as: Clearing existing open drains (e.g. turn-outs); vegetation control at intersections &amp; driveways; new roadside turning or temporary storage areas for mobile plant?</em></td>
</tr>
<tr>
<td></td>
<td>Any clearance outside NVC approved “maintenance envelope”. e.g. construction of new open drains; new stockpiles or work areas outside approved “maintenance envelope”; other maintenance requiring increased clearance or use of high impact methods</td>
</tr>
<tr>
<td></td>
<td><strong>External (NVC)</strong></td>
</tr>
<tr>
<td></td>
<td>If work occurs within existing road formation or in previously cleared roadside areas.</td>
</tr>
<tr>
<td></td>
<td>Minor clearing restricted to degraded sites (eg. for temporary stockpiles; equipment turning or temporary storage areas).</td>
</tr>
<tr>
<td></td>
<td>Any clearance of vegetation outside existing road formation (excluding previously assessed sites).</td>
</tr>
<tr>
<td></td>
<td>If no native vegetation is present based on previous assessment.</td>
</tr>
<tr>
<td></td>
<td>Minor clearance based on low off-target damage risk (e.g. selective control using low impact methods) in degraded native vegetation Rabbit trail-baiting programmes where native vegetation is present.</td>
</tr>
<tr>
<td></td>
<td>All but minor clearance as defined in the endorsed RVMP. Large control programs involving high off-target damage risk.</td>
</tr>
<tr>
<td></td>
<td>If vegetation is to be removed within 1m of existing fence-line and no plants of conservation significance are likely to be affected based on previous assessment.</td>
</tr>
<tr>
<td></td>
<td>If vegetation is to be removed within 1m of existing fence-line where plants of conservation significance may be present.</td>
</tr>
<tr>
<td></td>
<td>Any clearance exceeding approved standard as defined in the endorsed RVMP.</td>
</tr>
<tr>
<td></td>
<td>If no native vegetation is present based on previous assessment.</td>
</tr>
<tr>
<td></td>
<td>Maximum 5m wide (normal access), 10m wide (machinery) if native vegetation is present (but not of conservation significance).</td>
</tr>
<tr>
<td></td>
<td>Any clearance exceeding approved standard as defined in the endorsed RVMP.</td>
</tr>
<tr>
<td></td>
<td>If a 5m firebreak has been legally established and cleared in the previous year.</td>
</tr>
<tr>
<td></td>
<td>If a 5m firebreak has been legally established and cleared prior to previous year but before 5 years, and natural regeneration may have since occurred, and there is no adjacent cleared land. If adjacent land is cleared of native vegetation, review an appropriate location and method (rolling, slashing etc) for fire break by local council Bushfire</td>
</tr>
<tr>
<td></td>
<td>Any other proposed clearance for fire prevention needs approval from NVC, unless in accordance with a District Bushfire Management Plan, or through an application to the CFS Fire Prevention Officer.</td>
</tr>
</tbody>
</table>
problems with weed invasion and erosion.  

<table>
<thead>
<tr>
<th>Prevention Officer (or Regional Prevention Officer SA CFS).</th>
</tr>
</thead>
<tbody>
<tr>
<td>In high bushfire areas, new breaks maximum 20 m long across roadside, not &lt; 500m apart, on previously cleared or areas without native vegetation such as gateways.</td>
</tr>
</tbody>
</table>

Grazing (prohibited by council)  

<table>
<thead>
<tr>
<th>If no native vegetation is present based on previous assessment.</th>
</tr>
</thead>
</table>
| No native vegetation or only mature native trees & exotic grasses present  
| Short-term (i.e. < 1 week)                                       |
| Where native understorey or regenerating native vegetation is present. |

Removal of plant material (by council permit only)  

<table>
<thead>
<tr>
<th>If no native vegetation is present based on previous assessment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetation is dead or removed under permit from council or as per guidelines</td>
</tr>
<tr>
<td>Live timber, flowers, rare or scheduled species**, significant habitat.</td>
</tr>
</tbody>
</table>

Maintenance of vegetation diversity  

<table>
<thead>
<tr>
<th>If no native vegetation is present based on previous assessment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>If trimming or pruning of vegetation using appropriate, low impact cutting tools is proposed</td>
</tr>
<tr>
<td>Any measures involving burning, lopping or other disturbance of native vegetation.</td>
</tr>
</tbody>
</table>

*Minor and localized clearance, includes pruning of branches or removal of one or two tree saplings or shrubs which are known to be common in the area. However, even in these cases it is recommended that the Native Vegetation Conservation Section be advised prior to the work. It is possible that the site may contain a small, visually insignificant plant species (eg orchid or native grass) which is of particular conservation significance. A telephone call to the Section will enable records to be checked.

5.11 Monitoring of Roadside Vegetation

A process to monitor the effective implementation of the RVMP will be developed following endorsement by the Native Vegetation Council and the adoption by the District Council of Yankalilla and the City of Victor Harbor. Envisaged is a regular meeting with all stakeholders for each council with a representative of the NVC if available.

If accidental or unapproved damage to vegetation occurs an incident report form will be submitted to the NVC by the Council officer responsible for Natural Resource Management.

See page 155 in the Reporting and Review Section for the Incident Report Form.
Section 6 Reporting and Review

6.1 Reporting and Review

This section outlines how performance on implementing the RVMP will be reported, such as performance criteria, reporting frequency and people who receive the report (eg. Council, NVC). Reporting will be based on the annual report form below, and will include copies of completed checklists for significant projects.

POLICY: 27

The District Council of Yankalilla, the City of Victor Harbor and the Native Vegetation Council will review the RVMP after three years and then at five-year intervals.

Evaluation and Reporting for Local Government

The RVMP annual report will be used to evaluate how effectively the RVMP has been implemented. In particular this evaluation:

- provides a means of self-assessment for Council; and
- enables annual reporting to the Native Vegetation Council on compliance with the RVMP.

The form sets out the evaluation method for a RVMP. This template may be slightly modified to more closely reflect the specific goals and requirements of Council’s RVMP. Completed reports will be submitted to the Native Vegetation Council annually on an agreed date.
**Incident Report Form**

1. **REPORT OF INCIDENT**

<table>
<thead>
<tr>
<th>Date Reported:</th>
<th>Time Reported:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Incident:</td>
<td>Time of Incident:</td>
</tr>
<tr>
<td>Location of Incident/Hazard:</td>
<td></td>
</tr>
</tbody>
</table>

Details of Incident/Hazard (causes, effects, personnel involved, factual information only):

Witness Name:  
Signature:  
Was anyone injured?  
Has the Health and Safety Officer been notified?

2. **REMEDIAL ACTION**

Remedial action required:  
YES / NO
Details of proposed rectification work:  

(Attach additional comments if necessary)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Title:</th>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved by:</td>
<td>Signature:</td>
<td>Date:</td>
<td></td>
</tr>
</tbody>
</table>

3. **CLOSE OUT REPORT**

Outcome of remedial work:

<table>
<thead>
<tr>
<th>Name:</th>
<th>Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature:</td>
<td>Date:</td>
</tr>
</tbody>
</table>
Roadside Vegetation Management Plan – Annual Report

Council: 

Reporting Period: 

RVMP Title: 

Person completing this report: 

Contact details: 

How much roadside native vegetation has been cleared in the reporting period?

Length of roadside 

Area of vegetation 

Have there been any significant clearances of vegetation? Yes/No

Please provide details in the attachment:

2a. Significant clearances of native vegetation by Council

2b. Significant clearances of native vegetation by others

Include activities of council, landholders, service authorities, etc. such as roadworks, weed control programs fuel reduction burning, grazing, underground cabling.
## 2a. Significant clearances of native vegetation by Council within the District Council of Yankalilla or the City of Victor Harbor.

### Example:

<table>
<thead>
<tr>
<th>Who</th>
<th>Location</th>
<th>Purpose</th>
<th>Activity</th>
<th>Date</th>
<th>Vegetation type</th>
<th>Vegetation Management Category</th>
<th>Length/area cleared</th>
<th>2Consent type</th>
<th>All consent conditions met?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Council [name]</td>
<td>East Rd from X to Y</td>
<td>Road construction</td>
<td>Realignment</td>
<td>Jan-Feb 2003</td>
<td>Euc. obliqua woodland</td>
<td>3</td>
<td>500m²</td>
<td>NVC</td>
<td>Y / N</td>
</tr>
</tbody>
</table>

## 2b. Significant clearances of native vegetation by others within the District Council of [council name].

### Example:

<table>
<thead>
<tr>
<th>Who</th>
<th>Location</th>
<th>Purpose</th>
<th>Activity</th>
<th>Date</th>
<th>Vegetation type</th>
<th>Vegetation Management Category</th>
<th>Length/area cleared</th>
<th>2Consent type</th>
<th>Breach of consent Y / N</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landholder [name]</td>
<td>Range Rd, 2km west of [placename]</td>
<td>Fire prevention</td>
<td>Boom sprayed roadside</td>
<td>10 May 2003</td>
<td>Stipa sp. native grassland</td>
<td>2</td>
<td>300m x 15m</td>
<td>NG</td>
<td>Y</td>
<td>Reported to NVC - Action under LG Act</td>
</tr>
<tr>
<td>Spray contractor [name]</td>
<td>Hundred Line Rd from X to Y</td>
<td>Pest plant control</td>
<td>Cover spray boxthorn</td>
<td>May 2003</td>
<td>Acacia shrubland</td>
<td>3</td>
<td>200m² over 5km</td>
<td>NG</td>
<td>Y</td>
<td>Reported to NVC - Action under LG Act</td>
</tr>
</tbody>
</table>

1. Purpose:
   - Fire prevention
   - Grazing
   - Cultivation/ cropping
   - Property access
   - Wood collection
   - Fence replacement or repair
   - Fire
   - Pest plant control
   - Rabbit control
   - Road construction
   - Road maintenance
   - Service installation
   - Service maintenance
   - Other

2. Consent type:
   - RVMP complies with a condition in the NVC-endorsed RVMP
   - NVC complies with NVC consent (individual application)
   - Other complies with consent from external authority (e.g. EPBC Act)
   - NG not given (consent required but not obtained)
How many permits or approvals for clearance of native vegetation have been issued for the following purposes?

<table>
<thead>
<tr>
<th>Purpose</th>
<th>No. of applications</th>
<th>No. approved</th>
<th>Total area of vegetation approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire prevention (eg spraying, ploughing, burning)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grazing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultivation/ cropping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood collection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fence replacement or repair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service installation or maintenance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Roadside vegetation initiatives of Council.

Please provide details below.

<table>
<thead>
<tr>
<th>Project type</th>
<th>Reference in RVMP N/A if not applicable</th>
<th>New project? Y/N</th>
<th>Date commenced / date completed</th>
<th>Details of project* (include outcomes achieved)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadside vegetation surveys*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roadside marker schemes*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revegetation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weed control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pest animal control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applications for funding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Attach details if insufficient space.

Provide details of any Incident Reports involving the unauthorised clearance of roadside vegetation.

What relevant training sessions have been held? (Please provide details below).

<table>
<thead>
<tr>
<th>Training Topic</th>
<th>Audience</th>
<th>Number attending</th>
<th>Trainer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Has the RVMP been integrated into a Council strategic management plan? Yes/No

When is this RVMP due to be reviewed? ______________________________
Section 7 Complementary Programs

The following section describes the complementary programs and documents associated with the RVMP.

7.1 Roadside Vegetation Surveys

This section provides information on A Survey of Roadside Vegetation on the Fleurieu Peninsula (Michael Hyde 1997).

This survey covers the roadsides of the district council of Yankalilla, the City of Victor Harbor and the former district council of Port Elliot/Goolwa (Note: the former district council area of Port Elliot/Goolwa is included in the vegetation survey but not covered by the RVMP).

Included is the executive summary:

1. 2,002 kilometres of roadsides (1001 km of roads) were surveyed for remnant native vegetation.

   The resulting data was recorded and mapped as 3207 discrete segments averaging 625 metres in length. Each side of each road reserve was surveyed independently. Only developed road reserves were included in the survey. Urban areas were excluded.

2. 1018 kilometres (50.86%) of these roadsides contain remnant native vegetation in moderate, good, or near pristine condition.

   Native vegetation with one storey/layer present and some native species prominent in the understorey is considered to be in moderate condition (class 3); where all layers/storeys are present and native species diversity is high, in good condition (class 2); and where undisturbed, in near pristine condition (class 1).

3. Ten plant associations with conservation significance were recorded, comprising a total roadside length of 95 kilometres (4.75%).

   **Open Woodlands:**
   *Eucalyptus odorata* (Peppermint Box) Open Woodland 47.18 kilometres

   **Grassy Communities:**
   *Allocasuarina verticillata* Low Open Woodland 9.59 kilometres
   *Lomandra effusa* (Irongrass) Tussock Grassland .26 kilometres
   *Themeda triandra* (Kangaroo grass) Tussock grassland 3.89 kilometres
   Tussock Grassland 27.03 kilometres
   *Stipa stipoides* (Coastal spear-grass) Tussock grassland 1.78 kilometres

   **Swamps:**
   *Eucalyptus ovata* (Swamp gum) Forest .56 kilometres
   *Gleichenia microphylla* (Coral fern) Thicket .79 kilometres
   *Gahnia seiberiana* Sedgeland 2.46 kilometres
   *Leptospermum spp.* (Teatree) Thicket .54 kilometres
4. Sixty-five plant species with conservation significance were recorded, of which twenty-five are classified as regionally rare, and eight are regionally classified as either Vulnerable or Endangered.

Further populations of these, and many other significant species, undoubtedly grow on roadsides in these districts. Further occurrences can be added to that data set as they are located.

5. Thirty detailed vegetation survey sites were recorded in roadside vegetation, and 325 plant taxa recorded.

This represents approximately 20% of the plant species expected to occur on the Fleurieu Peninsula.

6. All data collected is included in the South Australian Biological Database.

7. A number of recommendations are included in the report:
   • That the undeveloped road reserves be surveyed for remnant native vegetation;
   • That searches for further populations of conservation significant species be made;
   • That significant sites be protected and marked;
   • That district vegetation management strategies including revegetation be developed;
   • That Pre-European vegetation mapping be completed for these districts to ensure revegetation is appropriate;
   • That additional data be collected and recorded in a format suitable for inclusion in the GIS based map coverage produced by this project.
7.2 Roadside Marker Scheme (RMS)

This section outlines the Roadside Marker Scheme that has been implemented across the Southern Fleurieu Peninsula.

It is used to identify significant roadside vegetation and is an important management tool. The RMS is considered an important component of the RVMP.

The roadside marker scheme is a very useful planning tool for roadside activities that could affect significant roadside vegetation.

The scheme involves the development of a significant sites register (database), the physical marking of these sites in the field and the development of management procedures to protect the identified sites.

The roadside marker scheme forms an important part of a RVMP as it allows Council employees, contractors and the public to readily identify significant roadside vegetation sites and any specific management practices associated with that site.

A training program for Council staff, contractors and adjoining landholders is an integral part of a RMS.
The Roadside Marker System identifies areas of significant remnant 'local native' vegetation.

The vegetation that occurred in an area prior to settlement is referred to as the 'locally indigenous' or 'local native' vegetation. This may – depending on the site – include trees, shrubs, groundcovers, grasses, sedges, and/or climbers.

Roadside remnants of the original 'local-native' vegetation are a biological and community asset. These stands are not only beautiful, they also:

- act as a wind buffer, helping to control erosion, and provide vital shade
- help to reduce nuisance dust, both from unmade roads and from activities on properties
- help to combat spray drift – fine-leaved species are particularly effective
- actually reduce fire-hazard if managed well
- provide habitat for other species – this is often the only available habitat – and thereby enhance biodiversity throughout the area. Often these species are vital to the control of insect & other pests
- provide a vital seed resource – again, often the only one available for local revegetation

Roadside Native Vegetation at risk -
There are often considerable pressures on roadside remnants to be considered if they are to be managed correctly. These may include:

- Road Works – road grading, sealing, stockpiling, and drainage & watertable maintenance
- Road Reserve Maintenance – slashing and spraying, woody-weed poisoning and/or removal

- Service Provision – trenching and other soil disturbances in order to lay pipes or cables for utilities such as ETSA, Telstra, SA Water etc.
- Public Access – walking, cycling & horse trails, picnicking, parking, firewood collection
- Undesirable Use – vandalism, dumping, wildflower picking, unauthorised seed-collection

If you should happen to see any damage to a site or its markers contact Brian Domon via the contact details on the back of this leaflet.

Thankyou!

The blue shield design for RMS marker signs, and the information displayed on the sign, is consistent throughout the state.

The manager of the site – for example The City of Victor Harbor (CVH), Transport SA (TSA) Markers may also be observed.

The number below the initials identifies the specific site.
7.3 Site Register or Database

Prior to installing markers a site register was developed. Information collected in the roadside vegetation surveys, on the location and type of vegetation sites, has formed the basis of the dataset. Key information to include in each site record is any control measures required to protect the site.
7.4 Other Information

Other documents that may be useful for Roadside Vegetation Management are listed below:

- **District Council of Yankalilla** Undeveloped road reserve vegetation survey 40 – Peter D. Clark;
- **City of Victor Harbor** Undeveloped road reserve vegetation survey 41 – Peter D. Clark;
- **Revegetation Principles, Planning, techniques, and Species Selection**: of the ‘Salinity and Water Quality Management in the Inman River, Waitpinga and Coolawang Creek Catchments’ has useful local and general revegetation information.