



Agriculturally rich – naturally beautiful



District Council of Yorke Peninsula

Roadside Vegetation Management Plan

11 July 2012

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1. INTRODUCTION AND BACKGROUND

1.1. Roadside Vegetation

The roadside is defined as the strip of land between the road formation and the boundary of the road reserve which is usually also the boundary of the adjacent property.

Roadside vegetation includes any vegetation growing on roadsides; this includes native vegetation of conservation value.

Indigenous or 'native' vegetation found on road reserves in South Australia represents remnants of pre-European settlement vegetation. These important biological assets often have significant conservation value, as much of the native vegetation within the agricultural region of the state has been removed or highly disturbed. In some areas roadsides support virtually the only remaining example of the original vegetation.

There are three broad benefits of preserving native vegetation on roadsides. They are:

Conservation Benefits

- Contains remnants of the original vegetation
- Can support populations of rare or threatened native flora
- Provides important habitat for native fauna, including reptiles and invertebrates
- Can form an important habitat corridor linking blocks of native vegetation
- May provide unique genetic reference areas for sourcing seed for revegetation and regeneration projects.

Functional Benefits

- May act as an effective low cost form of weed control by preventing the establishment of weeds,
- Generally less fire-prone than introduced vegetation
- Can provide valuable shelter for livestock and crops in adjacent agricultural land
- Helps define curves for the driving environment
- Reduces the velocity of water runoff, in turn reducing scour and erosion of batters and embankments

Social Benefits

- Provides amenity value to the general landscape
- Often contains flora contributing to the natural character and tourist appeal of a district
- Remnants provide an historical reminder of the vegetation across the landscape prior to settlement

Native bushland is an efficient, self-sustaining system, and after any ground disturbance, it may take a number of years to return to a stable state. Major disturbance can unbalance the system (e.g. through serious weed infestation) and cause long-term damage. In many instances inappropriate management activities can set up the next round of maintenance problems.

Low-impact management of roadside vegetation, for example, is an integral part of efficient and effective maintenance of roads. The vegetation cannot be considered independently of the soil and water that support it, and these in turn cannot be considered in isolation of the pavement. Good roadside management practices can generate potential savings in Local Council's road maintenance budget.

1.2. Legal Protection of Native Vegetation on Roadsides

The clearance of native vegetation, including that along roadsides, is controlled under the **Native Vegetation Act, 1991** and the **Native Vegetation Regulations 2003**. The Regulations among other things set out circumstances in which native vegetation may be cleared without the need for specific consent from the Native Vegetation Council (NVC). In dealing with the clearance of native vegetation the Regulations provide a mechanism to assist in the day to day management of a property.

Regulation 5(1)(y) allows either (i) for clearance by a Local Council, or someone acting on behalf of the council, where the clearance complies with a Roadside Vegetation Management Plan (RVMP) that has been approved by the NVC, or (ii)- if no such plan has been prepared and approved, the regulation allows clearance where this complies with guidelines issued by the NVC – “*Guidelines for the Management of Roadside Vegetation*”, which is available from the NVC Secretariat.

Other statutes relevant to the protection of native fauna and management of roadside vegetation include.

- Under the *Local Government Act 1999* (Section 221), Local Councils have the authority to regulate the planting, removal of or interference with, any roadside vegetation.
- The *National Parks and Wildlife Act 1972*, prohibits the removal of native vegetation without a permit from reserves, wilderness protection zones, Crown land, and public land or forest reserves in SA.
- The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, provides the strongest protection for listed species of threatened indigenous plants and animals and important habitats. Any action having a significant effect on these requires assessment and Commonwealth approval.

1.3. Purpose of this Roadside Vegetation Management Plan

This Roadside Vegetation Management Plan (RVMP) has been developed to provide a basis for managing roadside vegetation along all municipal controlled rural roads throughout the District Council of Yorke Peninsula.

It fulfils a legal requirement under the *Native Vegetation Act 1991*, which allows for clearance by a Local Council, or someone acting on behalf of the Local Council, where the clearance complies with a roadside management plan that has been approved by the Native Vegetation Council.

While the safe movement of travelling public is a key requirement of roads, and Local Councils have a responsibility to maintain adequate levels of safety and efficiency for drivers on Council owned roads, the District Council of Yorke Peninsula recognises that they also have a responsibility to retain and protect roadside vegetation wherever possible, as road reserves have become increasingly important for conservation reasons due to the removal of vegetation from adjoining land.

This Roadside Vegetation Management Plan:

- sets clear policies and guidelines for activities affecting roadsides
- provides a consistent, integrated approach to managing roadside vegetation;
- reduces potential Council liabilities; and

- provides a means for the District Council of Yorke Peninsula to demonstrate due diligence in its responsibility to protect and maintain native vegetation on roadsides.

However, this Roadside Vegetation Management Plan is not:

- a means of avoiding liability if native vegetation clearance offences do occur
- an appropriate mechanism to obtain environmental approval for large road construction works
- an approval for all roadside vegetation clearing, or
- a stand-alone document in isolation to other management structures and controls over activities that occur in road reserves for which the District Council of Yorke Peninsula has jurisdiction.

1.4. What This Roadside Vegetation Management Plan Contains

This Roadside Vegetation Management Plan (RVMP) contains:

- a summary of activities that may affect roadside vegetation and guidelines for undertaking these activities
- procedures for environmental assessment and approval prior to implementation of roadworks

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

While this plan covers the most common activities that can occur on roadsides in the District Council of Yorke Peninsula area, the "Guidelines for the management of Roadside Vegetation, (NVC, 1997)" apply for all other activities, and must be adhered to under Regulation 5(1)(y) of the Native Vegetation Regulations 2003.

This RVMP provides a basis to promote forward planning and improved co-operation between all roadside users in the management of road reserves. These include Local Council Chief Executive Officer, Director Assets and Infrastructure Services, Works Manager, Operations Manager, Natural Environment and Sustainability Officer, Development Services Manager, operational staff, local emergency services, adjacent private property owners, the NVC, and importantly, the general public.

1.5. Description of the Local Council Region

The District Council of Yorke Peninsula covers an area of 5,834 square kilometres and supports a population of 11,190 people. The road network consists of 431 kilometres of sealed road, 3238 kilometres of unsealed road, and 215 kilometres of unformed roads (un-made road reserves). In addition, 564 kilometres are the responsibility of the Department for Planning, Transport and Infrastructure (DPTI). The District Council of Yorke Peninsula has a responsibility to ensure that roads not only provide for the safe movement of traffic, but also reflect community expectations for their wider use.

The farming potential of Yorke Peninsula was recognised early on in South Australia's history and much of its indigenous vegetation was cleared to make way for crops and pastures. In the A biological survey of the *Mid-North and Yorke Peninsula*, Neagle (2008) reports that only 13.1 % of original native vegetation cover remains in the region,

the majority of this being found in small and fragmented parcels, such as in coastal reserves and along roadsides.

The remnant vegetation found along many roadsides within the District Council of Yorke Peninsula features mostly mallee associations (such as *Eucalyptus socialis*, *E. foecunda* and *E. incrassata*, *Allocasuarina verticillata*, shrubs such as *Melaleuca lanceolata*, *M. uncinata* and several Acacias) with low shrublands predominating nearer to the coast.

1.6. Key Objectives of This Roadside Vegetation Management Plan

The District Council of Yorke Peninsula's key objectives for roadside vegetation are to:

- meet legal requirements for both the provision and maintenance of a safe road network and the protection of roadside vegetation
- maintain and enhance the species diversity, genetic diversity, vegetation associations and habitat types currently occurring within existing roadside vegetation
- maintain and enhance the habitat and corridor value for indigenous flora and fauna
- minimise the adverse impacts of activities occurring within the roadside vegetation corridor
- clearly identify unauthorised activity in road reserves
- improve the awareness of roadside vegetation management issues for Local Council staff and contractors, the community and other authorities

1.7. How the Roadside Vegetation Management Plan was prepared

This Plan was developed by the District Council of Yorke Peninsula's Natural Environment and Sustainability Officer in consultation with the Chief Executive Officer, Director Assets and Infrastructure Services, Works Manager, and Operations Manager, to ensure it complies with the *Native Vegetation Act 1991*, other relevant legislative requirements and Council's plans and objectives.

As part of the consultative process, issues and activities affecting roadside vegetation within the district have been identified and management actions established to ensure compatibility with existing council policies and objectives. This includes development of standard operating procedures for managing roadside activities where those activities are likely to affect roadside native vegetation.

This RVMP was formally approved by the Native Vegetation Council on **11/07/2012** and endorsed by the **District Council of Yorke Peninsula** on **12/09/2012**.

1.8. How to Use This Roadside Vegetation Management Plan

This RVMP will be used as a working reference document within the District Council of Yorke Peninsula. Appropriate staff from the District Council of Yorke Peninsula's Assets and Infrastructure Services Department will be responsible for administering its implementation. It will be kept on the Councils website, at the following address <http://www.yorke.sa.gov.au/content/view/1003/447/>

This plan contains the minimum requirements of a RVMP that all Local Council's should have in their RVMP. This includes a brief description of the roadside vegetation management issues, best practice guidelines and the consultation and approval procedures required to clear under the Regulations of the *Native Vegetation Act 1991*. Council may conduct clearance of native vegetation according to the Plan (eg. road maintenance, fenceline clearance, property access).

Council staff and contractors will be updated on the plan to ensure they can implement the roadwork practices required to minimise damaging impacts on roadside vegetation.

1.9. Distribution of This Roadside Vegetation Management Plan

Copies of this RVMP will be distributed to all relevant Council staff and to all elected members. Copies will also be distributed to the NVC Secretariat and the Department for Environment and Natural Resources (DENR) office. A copy of the RVMP will be available at the Council offices for public viewing as well as on Council's website. It is the responsibility of the District Council of Yorke Peninsula's Natural Environment and Sustainability Officer to ensure the plan is kept current and the contents are promoted to Council staff and the community.

1.10. Reporting and Review Requirements

To ensure that compliance with the objectives of this RVMP have been met, this RVMP will be internally reviewed by the council every five years to provide an opportunity for Council to determine if the RVMP needs updating or not. Once the internal review is completed, the RVMP will be forwarded to Native Vegetation Assessment Panel to look at any significant changes, and re-endorse the plan for another set time period. This will help ensure the RVMP stays current with respect to legislation and terminology, and also to improve usability and relevance.

2. MANAGEMENT ISSUES

Native vegetation along roadsides needs careful management if it is to be conserved for future generations. Purely because of its linear nature, it is susceptible to gradual degradation through weed invasion. This degradation can be compounded if soils are disturbed or compacted by machinery or if low native shrubs or native grasses are unwittingly driven over or cleared. Not only can native plants be unnecessarily destroyed, but conditions can also be made unsuitable for natural regeneration, and management problems can also be created for adjoining landholders.

This section outlines the management issues relevant to the District Council of Yorke Peninsula that may impact on indigenous vegetation on roadsides and provides guidelines to reduce likely impacts, as well as any consultation or assessment procedures that are required.



2.1. NEW ROADWORKS CLEARANCE

Objectives

- To ensure new road construction activities meet road safety standards whilst ensuring minimum disturbance to roadside indigenous vegetation.

Information

The District Council of Yorke Peninsula sometimes needs to undertake roadworks which involve clearance of mature or relatively undisturbed native vegetation. *New roadworks*, include:

- construction of new roads along previously undeveloped road reserves,
- widening or realignment of existing roads,

These activities could have significant environmental impact and it is important that the vegetation be assessed prior to the works. If significant vegetation is present it may be possible to modify the roadworks to reduce or avoid critical impact.

- Under the *Native Vegetation Regulations 2003, Regulation 5(1)(d)* permits clearance of native vegetation for new road works provided that it is located such that it avoids or minimises the impact on significant areas of native vegetation. In particular, new road works or widening activities should seek to avoid areas containing an intact stratum of native vegetation. These types of activities require specific NVC approval and require a Significant Environmental Benefit (SEB) to offset the clearance

Road reserves shall not be opened or closed without prior consultation with the Native Vegetation Council. The opening up of roads, in particular, requires careful consideration as undeveloped road reserves are often important for native vegetation conservation or as potential revegetation corridors.

2.1.1. Consultation and Approval Procedures

Clearance approval under Regulation 5(1)(d) is required for new roadworks (ie. new road construction, widening, realignment,) which involve clearance of native vegetation. Where clearance is required for public safety, Regulation 5(1)(b) may apply.

*NOTE: This requirement does not apply to very minor and localised 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.** Within the District Council of Yorke Peninsula this will only occur on Level 2 and 3 roads as per Appendix 2, not Level 1 roads where significant vegetation (that includes DENR ThreatenedSpecies) is known to exist.*

*If in doubt as to what constitutes **minor clearance**, consultation with the Native Vegetation and Biodiversity Management Unit prior to the work is recommended. It is just possible that the site may contain a small, visually insignificant plant species (eg. orchid or native grass) which is of particular conservation significance.*

Where practical, Council will contact the Native vegetation and Biodiversity Management Unit early in the planning and design stages of new roadworks, in order to obtain information about potential native vegetation issues and any associated clearance approval requirements under the Native Vegetation Act, therefore minimising delays.

2.1.2. Guidelines

Road Design

District Council of Yorke Peninsula will consider the following design principles when planning new roadworks (prior to obtaining NVC approval):

- Avoid vegetation communities of high conservation significance.
- One wide roadside is preferable to two narrow roadsides.
- If widening is necessary where native vegetation is present on both sides, widening on the narrow roadside is preferred.
- The value of roadside vegetation is greater where there is native vegetation adjacent (outside the road reserve).
- Drainage systems and batters will be designed to minimise sedimentation of water courses, minimise discharge into disease-susceptible plant communities, and control erosion.
- To minimise potential environment impacts of new roadworks, Significant Environmental Benefit (SEB) requirements and obtain the necessary clearance approvals, the District Council of Yorke Peninsula will consult with the Native Vegetation Business Management Unit during the planning phase. If significant vegetation is present Council will investigate possible options to modify the roadworks to reduce or avoid critical impacts.

Road Construction

Once approval has been obtained from the NVC, the District Council of Yorke Peninsula will minimise the impact of construction on vegetation by abiding by the following guidelines:

- Clearly identify and mark with stakes or tape any significant or protected vegetation, habitat areas and sensitive areas prior to the commencement of works
- Always stay within the construction zone
- Keep machinery and stockpiles on previously cleared land
- Limit soil disturbances on roadside
- Limit vegetation removal to that approved by the NVC
- Identify the exact location of proposed stockpiles, plant compounds, access roads and turning areas to avoid any incidental vegetation damage
- Materials for construction works to be taken from disease and weed free sites
- Equipment should be cleared on site before moving on to other sites: this particularly applies where machinery is operating in weed-infested areas
- Only use the appropriate type and minimum size of machinery for the job
- Chip light material from tree removal and use as mulch to spread local seed for Level 1 roads (see Appendix 2). This may include the use of other machinery, such as the flail mower, which 'trims' and mulches at the same time with no soil disturbance. For Level 2 and 3 roads, retain light material within area for seed dispersal.

- If there is no alternative to burning, do not burn close to native vegetation.
- Strip and stock-pile topsoil from areas of good vegetation. Re-use as soon as possible.
- Avoid “cleaning-up” vegetation after construction. Retain stumps, dead wood and understorey where possible.
- If unsure about any environmental controls, contact the site supervisor.

Road Standards¹

The following standards for new road construction have been adopted by the District Council of Yorke Peninsula, and are to be carried out subject to approval from the NVC under Regulation 5(1)(d).

Construction for each type of road surface shall be carried out in accordance with accepted engineering practices and standards, especially in relation to the width of the carriageway and the width of the shoulder.

Sealed Roads

Road Carriageway Widths - New Class A or Class B (sealed) roads are to have a maximum road carriageway width of 10 metres, a shoulder width of up to 1.5 metres and a verge width of up to 2.5 metres on either side of the edge of the sealed carriageway (subject to Section 2.2 Roadside Maintenance and Section 2.3 Public Safety Clearance of this RVMP).

Vertical Height Clearance - The vertical height clearance envelope of new sealed roads is to be offset 4 metres from the edge of the sealed carriageway and up to a maximum height of 5 metres.

Unsealed Roads

Road Carriageway Widths - New unsealed roads are to have a maximum carriageway width of 10 metres and a verge width of up to 2 metres on either side of the carriageway (subject to Section 2. Public Safety Clearance of this RVMP)

Vertical Height Clearance

Vertical Height Clearance - The vertical height clearance envelope of new sealed roads is to be offset 2 metres from the edge of the sealed carriageway and up to a maximum height of 5 metres.

2.2. ROADSIDE MAINTENANCE

Objectives

- a) To ensure a safe and efficient road system whilst ensuring minimum disturbance to roadside indigenous vegetation.
- b) To ensure best management practices for vegetation maintenance works on roadsides are understood and adhered to.

Information

Adequate vertical and lateral clearance of roadside vegetation is needed for the safe movement of vehicles, and additional clearance is usually needed at intersections, crests and the inside of curves to provide adequate sight distance to ensure that a driver is able to perceive all possible road hazards in sufficient time and react accordingly. The degree of clearance needed will vary according to the standard and design speed of the road, the type and amount of traffic and the characteristics of the vegetation.

Along most of Councils roads, clearance to the necessary safety standard has already taken place, but regrowth may be encroaching back into the clearance space. This regrowth may be removed without clearance approval, **provided** that low impact methods are used (eg. slashing, rolling, chainsaws).

These clearance areas are generally referred to as *Clearance Envelopes*. Clearance envelopes used in the District Council of Yorke Peninsula are found in the diagrams below.

2.2.1. Consultation and Approval Procedures

- a) Maintenance of **existing** roadside vegetation clearances (clearance envelopes) by low impact methods and vegetation clearance for **sight distance** at intersections, driveways and curves, according to Austroad Standards, can generally proceed without clearance approval.
- b) Clearance approval is needed where:
 - clearance exceeding previously established safety standards is proposed (eg. construction of new open drains; new stockpiles or work areas outside approved "clearance envelope", or other maintenance requiring increased clearance; OR
 - regrowth has reached the stage where high-impact methods (eg. bulldozing) are proposed.

2.2.2. Guidelines

Reconstruction and maintenance for each type of road surface shall be carried out in accordance with accepted engineering practices and standards.

Any clearance proposed here is not meant to imply or establish safety standards.

Clearance envelopes are areas that are required to be clear of vegetation for the safe passage of legal height vehicles across the full width of the traffic lanes, and *secondary clearance envelopes* are further areas required to be kept clear of vegetation for adequate visibility of other traffic, signs and other roadside furniture. Usually, clearance to the necessary safety standards has already taken place, and regrowth encroaching back into these clearance spaces can be cleared without approval from the NVC.

As a general rule, regrowth vegetation less than 5 yrs old can be cleared in clearance envelopes without approval, clearance of vegetation between 5 and 10 years old requires consultation with the NVCS (and where a longer clearance cycle is deemed necessary, this is likely to be approved, and noted in the RVMP), and vegetation older than 10yrs would usually require assessment and NVC approval. If in doubt, check with the Council Operations Manager, or contact the NVCS office for advice.

Bitumen roads clearance:

- clearance up to 4 metres from edge of seal (maintain the established clearance safety standard) but will vary according to vegetation type, local conditions and community requirements and the need for roadside drainage works

Unsealed roads clearance:

- clearance up to 2 metres from the edge of the road (maintain the established clearance safety standard) and up to a maximum of 3 metres in the case of particularly vigorous species such as *Acacia cyclops*.

Sealed Roads Vertical Height Clearance:

- A clearance envelope is to be maintained up to a vertical height of 5 metres offset 4 metres from the edge of the sealed carriageway. Clearance beyond this height will require NVC approval.

Unsealed Roads Vertical Height Clearance:

- A clearance envelope is to be maintained to a vertical height up to 5 metres offset 2 metres from the edge of the grader line. Clearance beyond this height will require NVC approval.

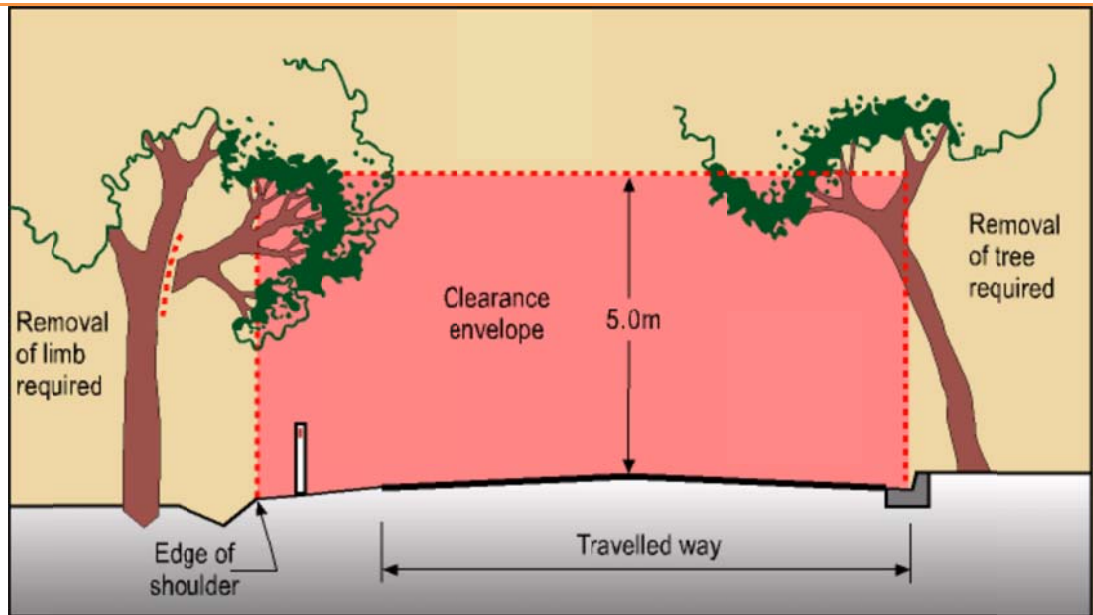


Figure 1: Standard vegetation clearance (kerbed and unkerbed)

- A secondary clearance envelope extending up to 500 mm around roadside furniture may also be sought (Figure 2). Additional vegetation control 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.

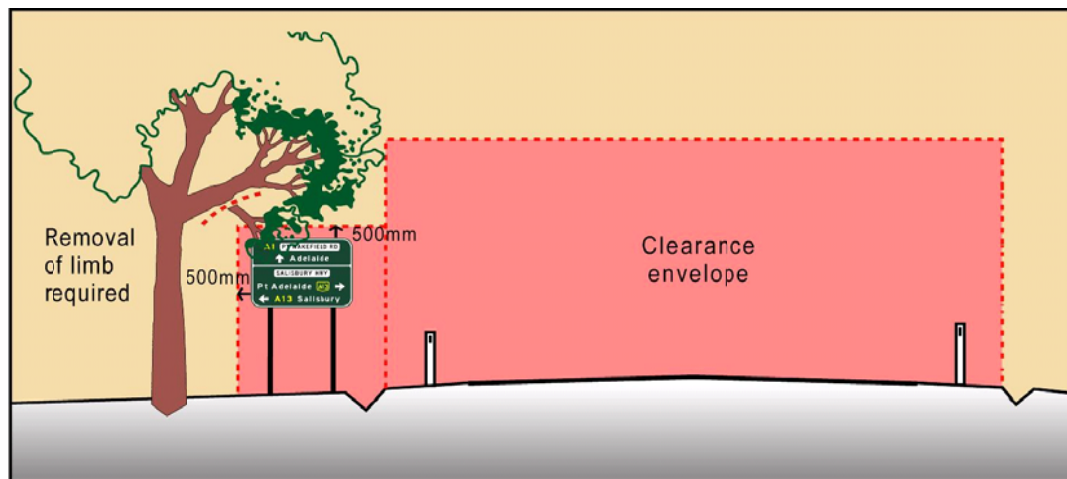


Figure 2: Clearance around roadside furniture

All Roads

Council Works staff will be issued with the Reference Map for Roadside Classification (Appendix 2) so that sensitive native vegetation sites are identified and managed accordingly. If Council Works staff are in doubt about the classification, roadsides will be subject to a “drive-by” inspection by a Council employee with relevant competency skills prior to the work so that any sensitive or difficult to identify native vegetation sites can be properly identified.

Code of Practice

The following codes of practice will be implemented by Council with the delegated responsible officer being the Council Operations Manager. If unsure about any environmental controls, contact the site supervisor.

- **Minimise Weed and Disease Spread**
 - clean down machinery in appropriate areas before entering and when leaving work site
 - program works to begin with clean machinery in high conservation areas and work toward degraded sites
 - only use soil or fill from a weed or disease free site
- **Turn-around Points**
 - on narrow roads of high or medium conservation value, identify machinery turn-around points where native vegetation will not be damaged
 - locate stockpiles, turn-out or lay-down areas on existing cleared land
- **Grading and Drain Cleaning Operations**
 - avoid damage to roots, bark and limbs
 - avoid working inside the drip line of trees
 - avoid working where root damage and soil compaction may occur
 - remove drain spoil and dispose of appropriately
 - care must be taken to ensure that the grader does not intrude beyond the existing carriageway width (grading a little further each time can have significant impact over a number of years)
- **Herbicides**
 - only use herbicides where vegetation control by mechanical methods is inappropriate
 - avoid over-spray by not spraying in windy conditions
- **Vegetation Removal**
 - avoid “cleaning up” vegetation and retain stumps, dead wood and understorey where possible
 - carefully prune trees using low impact methods in accordance with recognised arboriculture standards. Tree trimming will usually be undertaken using a moveable gang saw, although other equipment may be used in specific situations and localised pruning may be undertaken using chainsaws.
 - avoid damaging undergrowth when removing trees
 - dispose of waste materials at an appropriate site or depot or leave as habitat for wildlife (if considered to be habitat features, eg. hollow logs, or if small amounts, material may be left on site if it is spread widely and not allowed to form a pile, and is not considered to increase the amount of combustible material significantly).
 - low shrubs, native grasses and groundcovers generally do not affect road safety

and, where possible, will be retained in the clearance zones to help prevent weed invasion and erosion

- **Machinery Use**

- only use the appropriate type and minimum size of machinery for the job

- **Erosion Control**

- remove as little vegetation as possible and encourage the growth of native vegetation on batters
- maintain drainage systems
- minimise soil disturbance

Clearance Envelopes

Clearance envelopes are areas that are required to be clear of vegetation for the safe passage of legal height vehicles across the full width of the traffic lanes.

The main clearance envelope allows for the passage of legal height vehicles (4.6 metres) across the full width of the traffic lanes. To allow for regrowth between pruning and sagging of branches caused by wet or windy conditions, a minimum² clearance height of 5.0 metres will be maintained.

Rural or non-built up areas

Council will maintain a minimum clearance envelope that is 5.0 metres high.

On unsealed roads, every effort must be made to limit grading to the pre-existing width, and where possible this width should be documented for future maintenance works.

Urban or built up areas

It is desirable to maintain a vertical clearance of 5.0 metres from kerb face to kerb face.

Council will maintain a minimum clearance envelope that is 5.0 metres high, extending over the width of the travel lanes that are available for the passage of all legal road vehicles as shown in Figure 3.

² Reference to maintaining a minimum, does not suggest that an increased level of clearance can automatically occur. In some cases roads may have historically been maintained with a higher vertical clearance, and can continue to do.

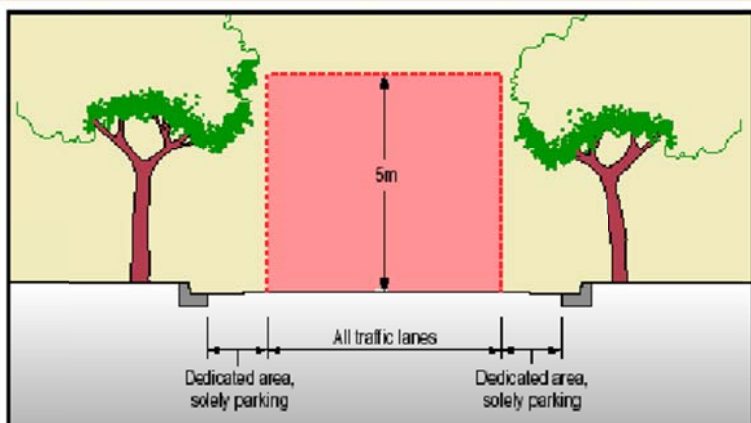


Figure 3: Urban Clearance Envelope (Minimum)

The clearance envelope is further modified on highway medians. A clear height of 2.1 metres will be maintained at the kerb and extend 1.0 metres from the carriageway or to the nearest edge of the trunk, whichever is lesser (Figure 4).

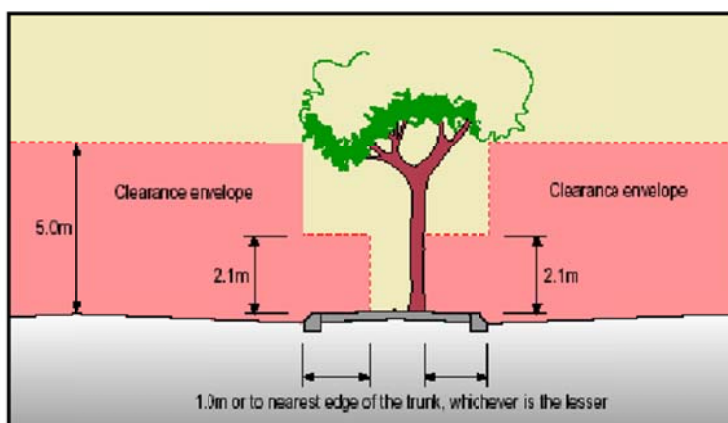


Figure 4: Change to clearance envelope at medians

Secondary Clearance Envelopes

Secondary clearance envelopes are further areas required to be kept clear of vegetation for adequate visibility of other traffic, signs and other roadside furniture. A secondary clearance envelope extending up to 500 mm around existing roadside furniture can occur (Figure 5). Additional vegetation control 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 6). At road intersections where corners are created, EXISTING verge clearance can be maintained for safe sight distance according to Austroad standards, and NEW clearance requires written approval under Regulation 5(1)(b). Low growing native plant species within the road verge that will not impair sight distance or pose a significant risk to vehicle safety are to be retained and promoted. The presence of these species can help prevent weed invasion and soil erosion, maintain a level of biodiversity in the area and can reduce roadside management costs.

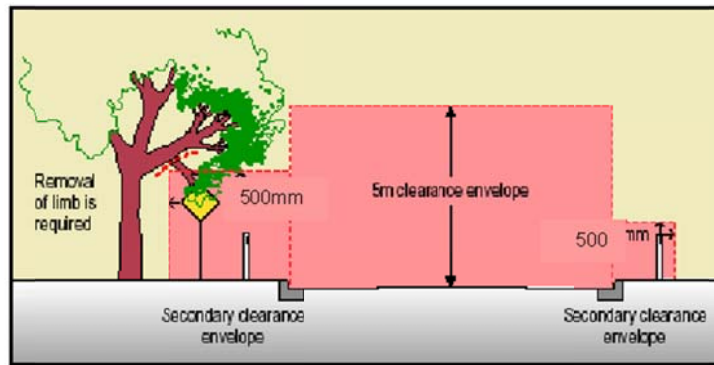


Figure 5: Secondary Clearance Envelope around existing roadside furniture

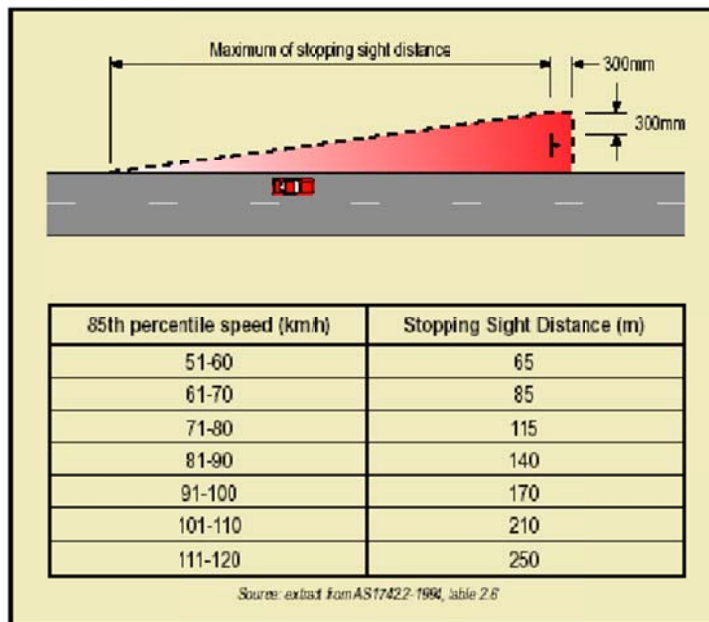


Figure 6: Secondary Clearance Envelope Along Road

2.3. PUBLIC SAFETY CLEARANCE

Objectives

- To balance roadside protection of native vegetation and public safety.
- To address any issues of public safety over and above those currently addressed (see Roadside Maintenance section) in accordance with the NVC '*Managing Native Vegetation - A Framework for the Application of Regulation 5(1)(lb), for Clearance Along Roads, Intersections and at Rail Crossings for Public Safety Purposes*'.

Information

Maintenance of existing clearances for road safety can occur under Regulation 5(1)(y) (see section on Road maintenance), but any clearance greater than this needs approval either under 5(1)(lb) where clearance is necessary to protect public safety, or under 5(1)(d) for infrastructure clearance (new road construction, widening or re-alignment).

Once any *additional* areas are authorised under Regulation 5(1)(lb), then these will be incorporated into the Maintenance section of this RVMP (either as an erratum, or added when the plan is next due for review).

This section of the RVMP summarises the requirements for Council when considering *new* clearance for the purpose of increasing levels of road safety under Regulation 5(1)(lb) in accordance with the NVC '*Managing Native Vegetation - A Framework for the Application of Regulation 5(1)(lb), for Clearance Along Roads, Intersections and at Rail Crossings for Public Safety Purposes*'. However, contact should be made with the NVBMU for advice.

2.3.1. Consultation and Approval Procedures

- Maintenance of existing roadside vegetation clearances (clearance envelopes) by low impact methods can generally proceed without clearance approval.
- New vegetation clearance for sight distance at intersections needs to occur according to Austroad Standards and requires written approval under Regulation 5(1)(lb).

2.3.2. Guidelines

If clearance greater than that considered exempt in Section 2 - Roadside Maintenance, is proposed -

- Firstly contact the NVBMU.
- Acting on their advice, provide the necessary data for the NVBMU to make an assessment of whether 5(1)(lb) is applicable or whether clearance falls under Regulation 5(1)(d).

2.4. FENCELINE CLEARANCE

Objectives

- To enable landholders to **gain appropriate access** to fence lines for maintenance and construction purposes.
- To **minimise the impact** and disturbance of native vegetation by clearance for fence-line construction and maintenance.
- To encourage **alternative approaches** for erecting fences that minimises clearance of roadside native vegetation.

Information

A landholder who wishes to clear native vegetation on a road reserve, to enable construction or maintenance of a boundary fence, requires consent of the District Council of Yorke Peninsula under the *Local Government Act 1999* (Section 221), and may, depending on the amount of vegetation involved, also require formal NVC approval. In granting any consent, the District Council of Yorke Peninsula must comply with the "Guidelines for the management of Roadside Vegetation (NVC, 1997)".

2.4.1. Consultation And Approval Procedures

- Clearance approval from the NVC is required for any vegetation clearance along fencelines which **exceeds** the standards below:
 - **Where the roadside vegetation consists largely of trees, only branches protruding through or overhanging the fence, or trees growing on the actual fence alignment, can be removed.**
 - **Where shrubs or bushes are growing through the fenceline, those plants growing within one metre of the fence alignment can be removed.**
- Consultation with the Native Vegetation and Biodiversity Management Unit should occur through the Local Council.
- If rare or threatened plant species (NPW Act Schedules or EPBC Act 1999) are present, Council staff are to consult with the Native Vegetation and Biodiversity Management Unit.
- These standards take into account that the adjoining landholder can usually clear vegetation that impedes access to a fence, for up to five metres width on the private land abutting the road, where that clearance is necessary to provide vehicular or other access for fence construction or maintenance (see Regulation 5(1)(s) – NOTE that it does not provide an automatic right to clear a five-metre strip along a fence. If vegetation on an adjacent property is located within five metres but does not impede reasonable access to the fence, the regulation cannot be used to clear that vegetation).

NOTE: Greater fenceline clearance may be justified in some districts which have high bushfire risk, or where there is fence maintenance problems associated with vigorously growing shrubs. If necessary, Councils can seek variation of the standards to suit local conditions.

2.4.2. Guidelines

Permission

- **Removal of native vegetation on a road reserve for the purpose of construction or maintenance of a boundary fence requires** consent of the **District Council of Yorke Peninsula.**
- In granting any consent, Council will comply with the following standards:
 - Where the roadside vegetation consists mainly 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 (1) metre of the fence alignment can be removed.
- **Clearance** approval from the NVC **is required for any native vegetation clearance along fencelines which exceeds the above standards.**
- Any unauthorised clearance will be referred by Council staff to the NVBMU.

Clearance methods

- Low impact methods of clearance (e.g. minimal ground disturbance, cutting cleanly rather than breaking branches) should only be used when clearing vegetation according to these standards.
- Cleared vegetation is to be removed from the site and not left on the road reserve, so as to minimise disturbance to the remaining vegetation (unless considered habitat features, eg. hollow logs, or if small amounts, material may be left on site if it is spread widely and not allowed to form a pile, and is not considered to increase the amount of combustible material significantly).

Re-locating Fences

- Landholders wanting to replace boundary fences may consider re-locating the new fencing a few metres into their properties to minimise potential impacts on roadside vegetation. This can also potentially reduce construction and maintenance costs. The narrow strip between the old and the new fence can be maintained clear of any regrowth to minimise impacts on the new fence, and also act as a firebreak between the roadside and the property.
- An alternative to the removal of trees in line with the property boundary may include constructing a simple strut arrangement that allows a fence to deviate a short distance around a tree. Wires are not attached directly to the tree, thus minimising potential damage to the tree (see photographs below).
- *Note: the above approach may not be appropriate for smaller trees, and an effort should be made to avoid structural roots when placing the post hold for the strut next to the tree.*



Above: A simple strut arrangement that allows a fence to deviate a short distance around a tree. Wires are not attached directly to the tree, thus minimising potential damage to the tree.



Above: The same strut arrangement seen from the side. The strut holding the wires away from the tree is directly behind the trunk. The wires are in place, but cannot be seen due to the light at the

2.5. PROPERTY ACCESS CLEARANCE

Objectives

- To minimise the loss of native vegetation through the construction of property access points
- To ensure clearance for safe sight distances are established and maintained in accordance with Austroad Standards³

Information

From time to time clearance of roadside vegetation may be required to provide access or improve access to private properties (eg. new driveways). For rural areas, a primary producer may need new access to a paddock, possibly to cater for wide farm machinery. In other situations (e.g. semi-urban) 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.

In addition to obligations under the *Native Vegetation Act 1991*, clearance for this purpose requires development approval from the District Council of Yorke Peninsula.

2.5.1. Consultation And Approval Procedures

- Clearance of roadside vegetation to provide access to adjoining land requires the consent of the District Council of Yorke Peninsula.
- In addition, approval is needed through the Native Vegetation and Biodiversity Management Unit for any proposed clearance of native vegetation for access which **exceeds the standards** in the guidelines section below.
- Consultation with the Native Vegetation and Biodiversity Management Unit should occur through the local council.
- If rare or threatened plant species (NPW Act Schedules or EPBC Act 1999) are present, Council staff are to consult with the Native Vegetation and Biodiversity Management Unit.

2.5.2. Guidelines

Permission

- Removal of native vegetation on a road reserve to provide access to adjoining land requires consent of the District Council of Yorke Peninsula.
- If there is more than one option which will provide safe access, the option which involves least disturbance of native vegetation, or vegetation of lower conservation significance 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.
- Clearance approval from the NVC is required for any native vegetation clearance along fencelines which exceeds the above standards.
- Any unauthorised clearance will be referred by Council staff to the Native Vegetation and Biodiversity Management Unit.
- Council will encourage the re-establishment of native vegetation on adjoining road reserves to offset any clearance. Any revegetation works must involve the reestablishment of local native plant species, grown from locally collected seed suitable for the soil types involved.

Clearance methods

- Low impact methods of clearance (e.g. minimal ground disturbance, cutting cleanly rather than breaking branches) should only be used when clearing vegetation according to these standards.
- Cleared vegetation is to be removed from the site and not left on the road reserve, so as to minimise disturbance to the remaining vegetation (unless considered habitat features, eg. hollow logs, or if small amounts, material may be left on site if it is spread widely and not allowed to form a pile, and is not considered to increase the amount of combustible material significantly).

Avoiding unnecessary clearance

- Care must be taken to avoid areas of native grassland and plant communities of conservation significance.

2.6. BUSHFIRE HAZARD REDUCTION

Objectives

- To take reasonable steps to inhibit the outbreak of fire on roadsides and the spread of fire through roadsides
- To minimise the adverse effects of fire management on roadside native vegetation.
- Regularly update this plan to be consistent with the **Flinders Mid North Yorke Bushfire Management Committee Interim** Bushfire Management Area Plan prepared under the *Fire and Emergency Services Act 2005* by the local bushfire management committee.

Information

The District Council of Yorke Peninsula is required to adhere to the *Fire and Emergency Service Act 2005*. This Act places the responsibility on Council to take reasonable steps to prevent or inhibit the outbreak and spread of fire on council owned land, including road sides.

The District Council of Yorke Peninsula is also required to adhere to the *Native Vegetation Act 1991*. Achieving the goals of both of these Acts can be difficult and requires careful planning. In some vegetation associations in the area, the *Environmental Protection Biodiversity and Conservation Act 1999* may also be applicable and so must also be considered.

Guidelines in this roadside vegetation management plan should be updated regularly to reflect any changes in the Bushfire Management Plans covering this Local Council area.

The District Council of Yorke Peninsula currently undertakes vegetation clearance for bushfire hazard reduction in residential areas where the risk of bushfire in these areas is considered to be high. Where native vegetation is involved, these works are undertaken in accordance with Regulations in the Native Vegetation Regulations 2003.

2.6.1. Consultation And Approval Procedures

Under the *Native Vegetation Act 1991*, the clearance of native vegetation to reduce the levels of combustible materials can occur if the works are undertaken in accordance with an approved Bushfire Management Plan **or** is authorised by the Chief Officer (or authorised delegate) of the SA CFS., ie. under Regulation 5A part (b)(ii) where the clearance -

- **(A) is required or authorised by, and undertaken in accordance with, a bushfire prevention plan; or**
- **(B) is undertaken in accordance with the written approval of the Chief Officer of SACFS.**

Note: Reference to bushfire prevention plan is deemed to be that referred to under the *Fire and Emergency Service Act 2005* as a Bushfire Management Area Plan.

Consultation with the CFS should normally occur through the CFS Regional Prevention

Officer.

Approval is not required for the maintenance of previously approved existing fuel breaks. All fuel modification works should be described in the District Bushfire Management Plan.

2.6.2. Guidelines

All fire prevention works on roadsides should link in with the District Bushfire Risk Management Plan and subsequent Council BMP or other local management plans and objectives.

Consult SA CFS to plan and evaluate fire prevention works that provide the best practices for the conservation and fire prevention on roadsides.

Permission

- Removal of native vegetation on a road reserve to provide access to reduce the level of combustible material requires consent of the District Council of Yorke Peninsula.
- In granting any consent, Council will comply with Regulation 5A part (b)(ii) where the clearance -
 - (A) is required or authorised by, and undertaken in accordance with, a bushfire prevention plan; or
 - (B) is undertaken in accordance with the written approval of the Chief Officer of SACFS.
- Any unauthorised clearance will be referred by Council staff to the Native Vegetation and Biodiversity Management Unit.

Clearance methods

- Low impact methods of clearance (e.g. minimal ground disturbance, cutting cleanly rather than breaking branches, slashing, trimming, mowing, or rolling) should only be used when clearing vegetation to reduce potential weed invasion and erosion problems.
- Grazing and herbicide use should only be contemplated where no or minimal impact upon native vegetation is likely.
- Limit the use of herbicides to spraying:
 - around furniture
 - for selective control of particular weeds where it is the most appropriate means of control
 - to control growth of potentially serious weeds on firebreaks (subject to the approval of the SA CFS Regional Prevention Officer), or
 - when weather conditions will minimise the likelihood of spray drift affecting non-target plants.

- Only remove vegetation that is referred to in the approved Bushfire Management Plan (eg. strategic clearance, removal of fine fuel), and retain all other vegetation including dead timber.
- Take care to minimise damage to the remaining vegetation.
- Wherever possible, bushfire hazard reduction which is needed on roadsides will be achieved through removal or control of exotic vegetation (eg. woody weeds, olives, Aleppo pines, etc and introduced grasses).
- Native vegetation growing on roadsides may be burnt as a means of reducing fuel only in those cases stipulated in the District Bushfire Management Plan and in consultation with the Native Vegetation Council.

Other considerations

- Any applications to revegetate roadsides must be assessed and approved by the Operations Manager.
- Design weed slashing programs to begin with clean machinery in high conservation value areas and work towards the more degraded sites. This will assist in the prevention of further spread of weeds

2.7. GRAZING AND MOWING

Objectives

- To minimise any impact of grazing by stock on roadside reserves where native vegetation is present (other than for droving purposes).

Information

Grazing of stock in areas of native vegetation can have severe impacts - damaging plants, assisting weed invasion, preventing natural regeneration and compacting and polluting the soil. The *Native Vegetation Act 1991* controls the grazing of native vegetation, and roadside grazing can also be controlled by Local Councils using by-laws under the *Local Government Act 1999*.

Grazing of roadsides devoid of native vegetation requires only the consent of the District Council of Yorke Peninsula. Grazing can be an acceptable form of roadside management in some situations, such as where exotic grasses like ***Phalaris*** have replaced native understorey and have created a fire hazard. At the same time areas of **native** grassland, which are of a very high conservation value, should be protected from roadside grazing.

In cases where grazing has historically occurred along roadsides, then this may continue at the same frequency and duration without NVC approval, however, **any change of stock, or increase in frequency or duration of grazing, or grazing of areas without any previous history of grazing, requires NVC approval.**

Many undeveloped road reserves are leased to adjoining landholders for grazing or cropping. In this situation, any clearance of native vegetation, or change in grazing practice which increased the pressure on native vegetation, requires clearance approval.

2.7.1. Consultation And Approval Procedures

- **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;
 - there is evidence of recent or periodic regeneration of native plant species.
- Modification of native vegetation on leased roads, by changed grazing practice, also needs clearance approval from the NVC.
- Roads may be grazed by domestic livestock or mown only after Council have done an inspection and determined –
 - a) there are native trees present but they are all above grazing height;
 - b) there are no native shrubs or native grasses;

- If stock are required to traverse roadside areas containing native grasses, shrubs and trees that are at grazing height, they must be kept moving at all times. A suitably qualified person should undertake any native vegetation inspection prior to droving, and routes which contain important stands of vegetation should be avoided as much as possible.
- Where leased road reserves contain vegetation which is under threat because of prevailing land management practices, Council will seek to protect that vegetation through amendment of lease conditions or, in extreme cases, through cessation of the lease. Unleased road reserves which contain significant native vegetation will generally not be leased, unless the purpose of the lease is to protect and manage the vegetation.

2.7.2. Guidelines

Permission

- Grazing on a road reserve requires consent of the District Council of Yorke Peninsula.
- In areas of native roadside vegetation, any change of stock, or increase in frequency or duration of grazing, or grazing of areas without any previous history of grazing, requires NVC approval.
- Any unauthorised clearance caused by grazing will be referred by Council staff to the Native Vegetation and Biodiversity Management Unit.

Clearance methods

- Stock must be free of pest plants and disease.

Fire Prevention

- Proposals for grazing of native roadside vegetation to aid in fuel reduction for fire prevention should be referred to the SA CFS for decisions.

Avoiding unnecessary clearance

- **If the roadside vegetation has not yet been assigned a roadside classification, a vegetation survey must be undertaken by suitably qualified persons to assign the vegetation present into these categories prior to undertaking any works.**

2.8. PROTECTION OF ROADSIDE VEGETATION OF PARTICULAR SIGNIFICANCE

Objectives

- To identify, record and protect roadside native vegetation of high conservation significance
- To reverse the deterioration of roadside native vegetation by improving management practices

Information

Roadsides may contain plants or vegetation types of high conservation significance (ie. rated as threatened plants or communities at either a national, state, or local, level, and / or vegetation classed as Category A and B – Level 1 on the Reference Map for Roadside Classification Appendix 2).

It is important that these locations are *identified, recorded and protected*.

While all native vegetation is protected and must not be cleared unless clearance is considered to be exempt or minor as stipulated in this plan, vegetation of high conservation significance requires *extra precautions* to prevent accidental damage (eg. signage), and in other cases, active management to prevent decline in quality (eg. Bushcare work)(also see next section – Restoration). Vegetation of high conservation significance is important to the region as it can provide:

- habitat for native animals and plants, including endangered species;
- 'links corridors' that allow native animals to move from one habitat area to another;
- unique genetic reference areas for sourcing seed for revegetation projects.

The District Council of Yorke Peninsula has assessed approximately a fifth of roadside vegetation through roadside vegetation survey(s) and aims to assess the remaining road sides. The District Council of Yorke Peninsula has produced a road network identifying the conservation significance for most roads throughout its region (Appendix 2).

These areas will be given special attention, eg:-

- a) close scrutiny in Council roadworks;
- b) a prohibition on the collection of firewood;
- c) encouragement of adjoining landholders to relocate any replacement fencing into their properties;
- d) wherever possible Council will consider an alternative transport route to minimise the impact on roadside vegetation of conservation value;
- e) DCYP will consult with the NVC on any roadworks outside of the practices endorsed in this RVMP which may impact on roadside vegetation of known high conservation value or species diversity.

Within the District Council of Yorke Peninsula, 15 nationally recognised threatened plant species have been recorded along roadsides, and 22 species threatened at a state level have also been recorded (refer to Appendix 2).

The map presented in Appendix 2 has been prepared for the purpose of guiding Council roadside operations and identifies three categories of roadside vegetation:

Level 1	Continuous vegetation including understorey in good condition and/or the presence of endangered species
Level 2	Good understorey but frequent gaps
Level 3	Sparse understorey

This map will be updated as roadside vegetation surveys are undertaken which provide new information regarding the quality of native roadside vegetation, including the location of threatened species.

Appendix 4 lists the range of activities that are acceptable within each management Level.

2.8.1. Consultation And Approval Procedures

Any activity involving native vegetation clearance in areas of high conservation significance requires consent from the District Council of Yorke Peninsula and the Native Vegetation Council.

2.8.2. Guidelines

Permission

- Any activity occurring in areas of high conservation significance requires consent from the District Council of Yorke Peninsula, and if native vegetation clearance is proposed, then consent is also required from the Native Vegetation Council.
- Any unauthorised clearance of road reserve native vegetation caused by activities will be referred by Council staff to the Native Vegetation and Biodiversity Management Unit.

Roadside surveys

- Assistance with funding for surveys will be sought from the Native Vegetation Council, and / or other funding body.
- Roadside vegetation surveys will be undertaken using the standard DENR roadside vegetation survey methodology to determine where significant species or vegetation occur.
- The overall ecological significance of sections of roadside vegetation has been determined.

Database

- A site register or database for significant roadside flora will be developed.

Roadside markers and Bushcare work

- When funding becomes available, Council intends to introduce a roadside marker scheme to further assist with the identification and management of significant sites. In consultation with Trees For Life, the Local Action Planning group and/or Regional Ecologist, Bushcare sites (see next section – Restoration) will also be encouraged wherever possible to help actively manage these important areas of native vegetation.

Roadside Activities

- Training programs for Local Council staff and others (eg. contractors), and development of work procedures to ensure protection of significant sites, will be implemented.
- A map of the vegetation categories for the road network within the District Council of Yorke Peninsula will be used to assist Council to minimise or avoid any loss or disturbance of native vegetation of conservation significance by locating proposed development or roadside works away from these areas.
- If it is not possible to avoid loss of native vegetation, Council will use the data collected and associated maps to identify areas of roadside vegetation that can be managed better as a way of providing an SEB offset which would be a requirement for clearance of vegetation associated with any new works under *Native Vegetation Regulation 5 (1)(d) of the Native Vegetation Act 1991*.



Roadside Conservation Reserve



Roadside marker

2.9. RESTORATION AND REVEGETATION ON ROADSIDE RESERVES

Objectives

- To encourage the re-establishment of native vegetation along roadsides in parts of the Local Council area where native vegetation has been identified as cleared or degraded.
- To prevent further degradation within road reserves giving high priority to rehabilitation works along High and Medium Conservation roadsides.

Information

The District Council of Yorke Peninsula is committed to roadside restoration and revegetation programs within the Council region.

Council recognises the ecological and aesthetic importance of restoring, maintaining and enhancing roadside native vegetation as areas of habitat for wildlife, to increase the biological diversity and seed stock of the area, and to create linkages for wildlife movement.

Other benefits include improving the amenity of an area, reducing the risk of soil erosion and soil salinity, and possibly reducing the risk of fire through appropriate fire management practices.

Within the District Council of Yorke Peninsula there are number of locations where roadside vegetation is being actively managed by community groups using minimal disturbance techniques to maintain biological diversity, or to promote regeneration of native species. This involves weeding, controlled burning, fencing and rubbish collection. Council supports the efforts of individuals and community groups to protect and enhance native vegetation along roadsides; however, it has a responsibility to ensure that such activities are conducted appropriately and in a manner that does not compromise the aims of road safety or bushfire hazard reduction.

2.9.1. Consultation And Approval Procedures

It is essential (and a legal requirement) that the permission of the District Council of Yorke Peninsula be obtained for roadside revegetation programs.

Planned revegetation programs will be conducted under Council's authorisation and will incorporate other Council maintenance policies aimed at minimising soil disturbance and associated weed establishment, control introduced plants and animals, and restrict grazing or development along roadside areas in the district.

Proposals for restoration and revegetation must also take into account the existing vegetation present, and consultation with the Native Vegetation Council is required where revegetation is to occur within areas of existing vegetation, particularly areas of native grassland, sedgeland and wetland which may never have had an overstorey.

2.9.2. Guidelines

Permission

- Any activity occurring in rehabilitated and revegetated areas requires consent from the District Council of Yorke Peninsula, and if native vegetation⁴ clearance is proposed, then consent is also required from the Native Vegetation Council.
- Application will need to be made to Council's Operations Manager, for approval to re-vegetate roadside reserves. When approving revegetation projects, Council must ensure compliance with Section 232 – Trees of the *Local Government Act 1999*. At a minimum, the applicant will need to supply the following details:
 - location and extent of roadside to be replanted;
 - a description of site preparation works (e.g. weed control)
 - a native plant species list
 - details of subsequent site management
- Applicants are responsible for locating all services (e.g. ETSA, SA Water and Telstra) and ensuring that plantings conform to ETSA guidelines (available from Council offices).
- In the interests of public safety Council reserves the right to maintain a safe road corridor. Any vegetation that does not conform to Council policy, as outlined in this document, may be removed.
- Any unauthorised clearance of road reserve native vegetation caused by activities will be referred by Council staff to the Native Vegetation and Biodiversity Management Unit.

Roadside rehabilitation and restoration

- The District Council of Yorke Peninsula, working with various stakeholders, encourages the rehabilitation and revegetation of suitable, degraded areas of road reserve through natural regeneration of native plant species and through utilising local native species.
- Restoration and rehabilitation programs will only be undertaken after the overall ecological significance of sections of roadside vegetation has been determined.
- Natural regeneration should be encouraged in High and Medium Conservation Value roadsides.
- Take care when planning planting of trees or shrubs in areas dominated by native grassland, sedgeland, or wetland species. The area may form part of a naturally occurring open (tree-less) plant association, and therefore disturbance may constitute clearance under the *Native Vegetation Act*. Consult with the Native Vegetation and Biodiversity Unit.
- Revegetation or rehabilitation programs should have a clear goal and appropriate monitoring in place in order to determine if the goal is being achieved.
- The following notes highlight some of the factors to be considered in planning a

⁴ Native Vegetation includes any pre-european or vegetation that has naturally regenerated (ie. by itself). It does not include vegetation that has been directly propagated and planted by hand. In other words, under the Native Vegetation Act approval for clearance of revegetated areas is not required, unless the area has naturally regenerated from original native vegetation, or if it is an area that was required to be planted as a requirement for a previous clearance approval under the Act (ie, SEB or set-aside area).

re-vegetation project:

Site Preparation:

Care must be taken to ensure that areas to be planted are properly prepared. This must be done to ensure that all weed competition is removed. Site preparation can be either mechanical or chemical. It therefore follows that sites should preferably be prepared some 9-12 months before planting is to take place by cultivation or the use of a chemical such as Roundup.

If this action is not taken the ensuing weed growth will create many problems and can in fact kill young trees. Plantings are best carried out during April – May or when the season breaks.

Plant selection:

It should be noted that the same type of plant can vary according to its locality and for that reason it is considered that only native vegetation indigenous to the locality should be considered, i.e. vegetation occurring within a ten kilometre radius. However, it must also be said that vegetation endemic to one area naturally growing in that particular soil type and of the appropriate vegetation association type should be given priority.

This will entail seed collection and tree propagation and various Yorke Peninsula community groups can be of assistance in this regard. See Appendix 6 for Recommended Native Plants for Gardens and Revegetation (to be used in conjunction with the advice above).

Database

- Rehabilitated sites will be recorded on a site register or database.
- Sites will be monitored with photo-point photos.

Roadside markers and Bushcare work

- Roadside Revegetation Sites will be added to the "Roadside Marker System (RMS) once developed to ensure protection of significant sites.
- In consultation with Trees For Life, the Local Action Planning group and/or Regional Ecologist, Bushcare sites will also be encouraged wherever possible to help actively manage these important areas of native vegetation.
- The District Council of Yorke Peninsula will continue to encourage and promote the maintenance and improvement of roadside vegetation diversity through the support of existing groups, and, where appropriate, the establishment of more local community groups, to undertake restoration activities.
- Community groups should be encouraged to become involved in Bushcare work, eg. Adopt a roadside school program.

2.10. REMOVAL OF PLANT MATERIAL

Objectives

- To promote the statutory requirements for retaining roadside native vegetation
- To limit the extent of damage caused by removal of roadside native vegetation
- To ensure that only a sustainable amount of native vegetation is removed from roadsides.

Information

The removal of plant material from roadsides includes:

- collection of dead timber for firewood;
- cutting of live timber;
- brush cutting;
- seed collection; and
- flower harvesting.

All such activities require the consent of the local council and other constraints may also apply – as set out below.

2.10.1. Consultation And Approval Procedures

Removal of plant material from road reserves requires the consent of the District Council of Yorke Peninsula, and in the following instances, also requires clearance consent under the Native Vegetation Act:

- removal of dead plants as defined under the *Native Vegetation Act 1991*
- cutting of live timber (outside the scope of the guidelines in this RVMP)
- the cutting of brush (*Melaleuca uncinata*) unless it is undertaken in accordance with other guidelines in this RVMP
- the harvesting of flowers.

In the case of seed collection, a permit is also needed from the Department for Environment and Natural Resources, who can also provide guidance as to how collect seed.

2.10.2. Guidelines

Permission

- Removal of plant material within a road reserve as set out below requires consent of the District Council of Yorke Peninsula.
- Any unauthorised clearance of road reserve native vegetation caused by activities will be referred by Council staff to the Native Vegetation and Biodiversity Management Unit.

Collection of Dead Timber

The removal of dead timber from roadsides is not controlled under the *Native Vegetation Act 1991* unless (as defined by the *Native Vegetation Regulations 2003*) it comprises trees of a species native to South Australia (a) that have a trunk circumference (measured at a point 300 mm above the base of tree) of 2 metres or more; and (b) that provide or have the potential to provide, or are a part of a group of trees or other plants (whether dead or alive) that provide, or have a potential to provide, a habitat for animals of a listed threatened species under the *Environmental Protection and Biodiversity Act 1999* of the Commonwealth.

However, the District Council of Yorke Peninsula controls this activity as dead timber, both standing and fallen, provides habitat for native fauna, and flora, and is also important in the recycling of nutrients.

The removal of dead timber from Level 1 roadsides is prohibited so as to avoid damaging habitat for wildlife (i.e. reptiles etc.) and small native plants adapted to and protected by the sheltered conditions provided by fallen timber (fallen timber may protect small plants physically from grazing by rabbits, kangaroos etc., and also provide optimal conditions for survival – darker and moister micro-habitats). Particular attention will be given to the retention of dead timber with hollows, as the development of hollow timber takes many years and is a limited resource for wildlife.

Exceptions may be made in Level 2 and 3 areas where fuel loads are high and the removal of dead fallen timber will mitigate bushfire hazard in accordance with the District Bushfire Management Plan under the *Fire and Emergency Services Act 2005*, or to remove timber which is hazardous to traffic or fencing. However, local ratepayers will need to apply for a permit to remove dead timber, and will be provided with a map indicating the specific areas in which it is permissible to do so.

If a permit to collect fallen timber is granted it will clearly specify that care be taken not to damage any surrounding native vegetation.

Cutting of Live timber

Any cutting of live timber outside of the scope of guidelines in this plan requires the consent of the District Council of Yorke Peninsula and also clearance consent under the *Native Vegetation Act 1991*.

Seed Collection (Cuttings and Specimens)

Revegetation programs using local species are strongly supported and roadsides are often ideal sites for seed collection. However, care is needed to minimise damage to the parent plant and to avoid depleting the seed supply to such an extent that natural regeneration of plants on the roadside is affected.

The collection of seeds, cuttings and specimens from native vegetation from roadsides, requires the consent of the local council and from DENR under Section 49 of the *National Parks and Wildlife Act 1972* through a *Permit to Collect Native Plant Material*

(contact the Fauna Permit Unit of DENR, telephone 8463 4841).

The collection of seeds, cuttings or other specimens from native plants does not require consent from the NVC provided that damage to the plant is not substantial. As a guide, cutting a substantial branch off a tree or bush to collect seed would not be regarded as exempt; nor would the removal of virtually all harvestable seed from a single plant.

Nevertheless, the District Council of Yorke Peninsula will give preference to seed collecting permits associated with local revegetation projects, and tree trimming programs (for verge maintenance) will be undertaken in consultation with local revegetation groups to facilitate the collection of seed from trimmed vegetation.

Flower Harvesting

The harvesting of flowers from roadsides requires the consent of Council and clearance consent. Council should be the first point of contact.

In general, harvesting of roadside flowers, particularly for commercial purposes, is not favoured because of its impact on the vegetation and on the landscape or amenity of the area.

2.11. PEST PLANT AND ANIMAL CONTROL

Objectives

- Reduce the establishment of new pest plants and animals in the District Council of Yorke Peninsula.
- Reduce the spread of existing pest plants and animals and their range and numbers.
- Reduce the impacts of existing pest plants and animals on roadside native vegetation.
- Reduce threats to agriculture, natural environments and public safety

Information

Pest plants and pest animals are more commonly known as 'weeds' and 'feral animals'. They can invade rural land or natural habitats and because of their characteristics and/or location, they can cause economic, ecological, physical or aesthetic problems, often with significant potential impacts on local and regional biodiversity.

Pest plants and animals can be divided into those that require control under legislation (ie. are "declared" species), and those that whilst still damaging, are not considered significant enough to warrant legislative control (ie. "non-declared" species, for example pasture grasses and non-local Australian native plants). While there is no legal requirement that non-declared species be controlled, it is important that they be discouraged as, in the case of plants, they can increase the fire hazard as well as replacing more valuable local natives.

Without appropriate control and preventative measures in place, weeds in particular can invade and degrade native vegetation areas both on and adjacent to the roadside, as well as more distant areas via the road network.

As indicated in the 1989 report of Wigan and Malcolm, weed invasion of roadsides is a significant issue in the district, with bridal creeper and boxthorn being the main concerns. Programs for boxthorn control are being coordinated by the Northern and Yorke Natural Resource Management Board. The Board also have biological trials in place on Yorke Peninsula for the control of Bridal Creeper, which include rust and insect control.

The revegetation of roadsides with appropriate native species will be encouraged as part of a longer term weed control strategy.

2.11.1. Consultation And Approval Procedures

Native Vegetation Act 1991

Clearance approval is required where a proposed animal or plant control program is likely to cause significant damage to native roadside vegetation.

"Significant" in this context includes ripping of warrens where native vegetation will be affected, non-selective spraying in mixed weeds / native vegetation, and burning of native

vegetation to assist pest control. It does not include minor damage, such as removal of branches to gain access to pests.

The NVMB Unit is able to determine whether proposed clearance is of a sufficiently significant nature to warrant referral on to the NVC for decision.

NRM Act, 2004

The *Natural Resources Management Act, 2004* (the NRM Act) refers to classes of plants and animals for which certain provisions of the Act apply. These species are declared pursuant to section 174 of the NRM Act, and are often referred to as *declared* animals or plants.

Section 182(7) of the NRM Act makes it clear that the NRM Board (or NRM Group, where one exists) has the responsibility to control on road reserves any pest plant or pest animal.

Section 185 of the NRM Act allows the Board to charge the adjoining landowners for control work **on the section of road reserve adjoining the owner's land up to the middle of the road reserve** in the case of most declared species.

Local Government Act, 1999

Under Section 221 of the *Local Government Act, 1999*, it is illegal for landholders to undertake pest plant and animal control work on the road reserve adjoining their property without authority from the relevant Local Council. Some Councils give authorisation for adjacent landholders to conduct declared animal and plant control on road reserves, on the proviso that landowners consult the relevant NRM Board before undertaking the work. This Council **does** do this, through the process of placing notices within the local newspaper.

Impacts to native vegetation during control works must be minimised in accordance with the requirements of the *Natural Resources Management Act 2004*⁵ and NVC guidelines 'Clearance of Native Vegetation associated with the Control of Plant and Animal Pests'

Removal of weeds and pests other than declared species, are controlled by the **District Council of Yorke Peninsula in conjunction with the NRM Board.**

⁵ 192—Protection of certain vegetation and habitats

- (1) A person must, in taking measures for the control of animals or plants under this Chapter, take all reasonable steps to ensure—
 - (a) that native vegetation is not cleared except in accordance with guidelines prepared by the Native Vegetation Council under section 25 of the *Native Vegetation Act 1991*; and
 - (b) that damage to or destruction of other vegetation is kept to a minimum (unless the vegetation is subject to destruction or control under this Chapter).

2.11.2. Guidelines

Where adjoining landholders are planning roadside pest control which could affect native vegetation, the local authorised NRM officer should be the first point of contact. The need for consultation with the Native Vegetation Conservation Section can then be determined.

In districts where there are serious problems with roadside pest control, local Boards are encouraged to develop overall management strategies in consultation with the Native Vegetation and Biodiversity Management Unit. This can avoid the need for consultation with the Unit on a case-by-case basis.

Suitably qualified contractors or council staff trained in the identification of native vegetation and weeds will be used to implement control procedures that minimise disturbance and damage to native vegetation.

NVC Guidelines

The clearance of native vegetation during programs for control of declared animals and plants must be kept to the minimum needed for effective pest control (in accordance with advice from the local NRM / State Authorised Officer or NRM Board) and must be in accordance with these guidelines:

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 affect the overall viability of the plant(s) involved.

Spraying of Herbicides in Native Vegetation

- Spraying of declared plants in native vegetation is acceptable provided that a careful and selective approach is used (e.g. spot-spraying) and damage to nearby native vegetation is avoided or minimised.
- 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 Native Vegetation and Biodiversity Management Unit or NVC Secretariat, DENR, and may require the consent of the NVC through a clearance application.

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 and Biodiversity Management Unit or NVC Secretariat, DENR.

Site Inspection

- 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 DENR staff.
- For larger scale clearance, or for cases where the identity of the native plants is unclear, a site inspection will usually be undertaken in consultation with the NVC Secretariat. Within the District Council of Yorke Peninsula this will occur in consultation with the NRM Board.
- Where minor clearance is endorsed by the NVBMU without an inspection, it will be recorded by notation on the appropriate DENR file. This will allow any reports of

illegal clearance to be managed or dispelled rapidly. Where an inspection is undertaken and endorsement given, the NVBMU will advise the landholder / authorised officer in writing.

- If, as a result of the above consultation, the Native Vegetation and Biodiversity Management Unit or NVC 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 NVC for decision. This may occur, for example, where a substantial area of native vegetation is involved, or where the clearance involves plant species of conservation significance.

Landscape Scale Planning Approach

- Broader planning arrangements may be developed between NRM Boards / Authorised Officers and DENR.
- 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 Board.

General Guidelines

Before conducting any pest plant and animal control activities within road reserve areas, permission must be sought from the Regional Authorised Officer in liaison with the District Council of Yorke Peninsula.

The control of listed pest plants and declared pest animals should be in accordance with advice from the local NRM or State Authorised Officer.

Council supports the removal of much larger woody weeds, which include European Olives (*Olea europaea*) and Aleppo Pines (*Pinus halepensis*); however, no such trees should be removed without permission from Council and adjoining landholders, which will include any necessary consultation process.

Avoid damage to native vegetation as required under the *Natural Resources Management Act 2004*, Section 193(2)(d)(v).

Council will endeavour to ensure that its works practices do not promote or assist the spread of weeds along roadsides. For example, unnecessary soil disturbance on road verges will be minimised. The following code of practice will be observed:

Pest Plants

- Work from areas of low weed infestation in towards more densely infested sections.
- Always ensure vehicles and machinery are cleaned before moving into areas of little weed infestation or High Conservation Value.
- Do not slash when weeds are seeding i.e. cut as early in season as possible to limit potential seed spread.
- Check the site for pest plants before grading, mowing or clearing
- Ensure road maintenance material is collected from areas free of pest plants
- If material is affected, please contact your supervisor
- Herbicide shall only be used by trained licensed operators in accordance with manufacturer's guidelines

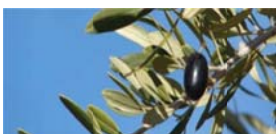
- Minimalist herbicide application techniques other than spot-spraying can be used in areas of native vegetation, eg. Wipe on with sponge and tongs, and cut and swab
- On areas where spot-spraying is used, care must be taken to avoid off-target spray-drift by for example, adjusting spray-nozzle, using a shield over the spray nozzle, and not spraying on windy days
- Depending on the type of vegetation present and weeds to be controlled, low-impact methods of weed control such as hand-pulling of weeds, and digging and grubbing to remove all underground parts, may be the best methods of control to minimise damage to native vegetation
- Herbicide use should be limited to control of vegetation where mechanical methods are inappropriate
- Do not spray herbicides in waterways
- Ensure that equipment is washed down well away from watercourses
- Use hand-held equipment for very localised pest control issues.

Pest Animals

- Baits and poisons should be selected and used in a way which minimizes the risk to native animals.
- Avoid extensive ripping of warrens where there is a good cover of native vegetation (noting that ripping of native vegetation requires clearance approval).
- Minimise soil and vegetation disturbance
- Ensure that all equipment is free of soil and vegetation prior to moving onto and off site.

Permission

Any activity occurring within a road reserve infested with a soil-borne plant disease such as *Phytophthora* requires consent of the District Council of Yorke Peninsula.



3. REFERENCES

Australian Standards (2007). *AS 1742.7 Manual for uniform traffic control devices, Part 7: Railway Crossings*. Australian Standards, Sydney, Australia.

Austrorads publications dealing with Road design:

<http://www.onlinepublications.austrorads.com.au/script/ICSDocBrowse.asp?Code=99.AR.RD&StdType=Austrorads>

Country Fire Service, *Flinders Mid North Yorke Bushfire Management Committee Interim Bushfire Management Area Plan*, South Australia.

Neagle, N. (2008) *A biological survey of the Mid North and Yorke Peninsula, South Australia, 2003-2004*, Department for Environment and Heritage, South Australia.

Native Vegetation Council (NVC) (1997). *Guidelines for Management of Roadside Vegetation*. Department of Environment and Heritage, South Australia.

Wigan, A. & Malcolm, I.R. (1989) *Draft report to Yorke Peninsula Roadside Vegetation Steering Group on Roadside Vegetation management plan for Yorke Peninsula*. (Dept Environment & Planning, SA).

4. ABBREVIATIONS & DEFINITIONS

Abbreviations

BMP	Bushfire Management Plan
CEO	Chief Executive Officer
CFS	Country Fire Service
DENR	Department of Environment and Natural Resources
EPBC	Environment Protection and Biodiversity Conservation
LGA	Local Government Association
NAMO	No loss, Avoid Clearance, Minimise impacts, Offset
NPW	National Parks and Wildlife
NRM	Natural Resources Management
NVAP	Native Vegetation Assessment Panel
NVBMU	Native Vegetation and Biodiversity Management Unit
NVC	Native Vegetation Council as established by the <i>Native Vegetation Act, 1991</i> .
NVCS	Native Vegetation Council Secretariat
RMS	Roadside Marker System
RVMP	Roadside Vegetation Management Plan
SEB	Significant Environmental Benefit

Definitions

Clearance (from the <i>Native Vegetation Act 1991</i>)	<ul style="list-style-type: none"> • (a) the killing or destruction of native vegetation; • (b) the removal of native vegetation; • (c) the severing of branches, limbs, stems or trunks of native vegetation; • (d) the burning of native vegetation; • (e) any other substantial damage to native vegetation, • and includes the draining or flooding of land, or any other act or activity, that causes the killing or destruction of native vegetation, the severing of branches, limbs, stems or trunks of native vegetation or any other substantial damage to native vegetation.
Clearance Envelope	<p>The area required to be clear of vegetation for the safe passage of legal height vehicles across the full width of the traffic lanes</p> <p>[<i>Secondary clearance envelopes</i> are further areas required to be kept clear of vegetation for adequate visibility of other traffic, signs and other roadside furniture].</p>
Local Council	Local Government body constituted under the <i>Local Government Act 1999</i> .
Droving or Movement of Stock	Moving stock, usually cattle or sheep, from one place to another by driving them slowly on foot along roadways or stock routes.
Grazing of Stock	Using a particular area for grazing rather than for movement of livestock.
Indigenous (or Native) Vegetation	Local (naturally established) native vegetation species of the type occurring prior to European settlement in this district.
NAMO	<p>A set of principles that should be considered in the decision making process in order to minimise or avoid impacts on biodiversity or vegetation. They include:</p> <p>N – Ensure no loss A – Avoid clearance M – Minimise the impacts of clearance O – Offsetting any clearance</p>
Natural Regeneration	New growth of indigenous native plants from seed or sucker growth.
Native Vegetation (adapted from the <i>Native Vegetation Act 1991</i>). This definition does not	Any plant or plants of a species indigenous to South Australia, including a plant or plants growing in or under waters of the sea, but does not include:

<p>represent the full legal wording of this term – see the <i>Native Vegetation Act 1991</i> for the exact wording.</p>	<p>(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</p> <p>(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 <i>Native Vegetation Act 1991</i>(or the 1985 clearance legislation)</p> <p>In this context native vegetation does include dead trees of a species indigenous to South Australia if:</p> <p>a) the trunk circumference (measured at a point 300mm above the base of the tree) (i) in the case of a tree located on Kangaroo Island – 1 metre or more, or (ii) in any other case – 2 metres or more), and</p> <p>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 Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>.</p>
<p>Remnant Vegetation</p>	<p>Surviving indigenous vegetation</p>
<p>Road (from <i>Roads (Opening and Closing) Act 1991</i>)</p>	<p>is —</p> <p>(a) a public road within the meaning of section 4 of the <i>Local Government Act 1999</i>; or</p> <p>(ab) an alley, laneway, walkway or other similar thoroughfare vested in a council; or</p> <p>(b) in relation to a part of the State not within a council area—</p> <p>(i) a road or street delineated and shown on a public map or plan of the State as laid out for public purposes by the Crown; or</p> <p>(ii) a road or street opened under this Act or any other Act relating to the opening of new roads and streets; or</p> <p>(iii) a road or street transferred or surrendered to the Minister of Local Government or the Crown by the owner or lessee for use as a public road or street; or</p> <p>(iv) a road or street declared or dedicated under any other Act to be a public road or street,</p> <p>and includes part of a road.</p>

Roadside	Is defined as the strip of land between the road formation and the boundary of the road reserve.
Roadway (or Carriageway)	That portion of the road devoted particularly to the use of vehicles, inclusive of shoulders and auxiliary lanes.
Road Reserve	<p>The total strip of land reserved for transportation purposes, whether constructed or not, and extends property boundary on one side to property boundary on the other side (it may or may not be fenced).</p> <p>The road reserve includes the roadside.</p>
Roadside Vegetation	Is any vegetation growing on a road reserve, and includes vegetation on a roadside (the area adjacent to a formed road), and vegetation growing on an unmade or undeveloped road reserve; this includes native vegetation of conservation value and vegetation dominated by introduced species.
Road Shoulder	The portion of formed carriageway that is adjacent to the traffic lane and flush with the surface of the pavement.
Road Verge	That portion of the formation not covered by the carriageway or the footpath.
Significant Environmental Benefit	<p>The <i>Native Vegetation Act 1991</i> includes provisions requiring the clearance of native vegetation to be offset by an environmental gain, referred to by the legislation as a 'Significant Environmental Benefit' (SEB).</p> <p>The rationale for an SEB offset recognises that clearance of native vegetation will result in the loss (even temporary) of habitat, biodiversity and/or other environmental values, in a landscape that has already been significantly modified by human settlement.</p> <p>The SEB provides a mechanism to minimise that loss by managing, restoring or re-establishing areas of native vegetation that result in a better outcome for the environment.</p>
Table Drain	The side drain of a road adjacent to the shoulder, having its invert lower than the pavement base and being part of the formation.
Threatened Species	Indigenous flora and fauna under threat of extinction (usually categorised to level of threat as: uncommon, rare, vulnerable, endangered or critically endangered)
Traffic Lane	A portion of the carriageway allocated for the use of a single line of vehicles.
Travelled Way	That portion of a carriageway ordinarily assigned to moving traffic, and exclusive of shoulders and parking

	lanes.
Unused Road Reserve	A road that has been gazetted under the <i>Crown Lands Act 1929</i> where it is not used for public traffic.
Vegetation	Any living or dead plant material (trees, shrubs, groundcovers including herbs; grasses; reeds, rushes and other aquatic species.
Weeds	A plant species not indigenous to the area and which invades endemic vegetation

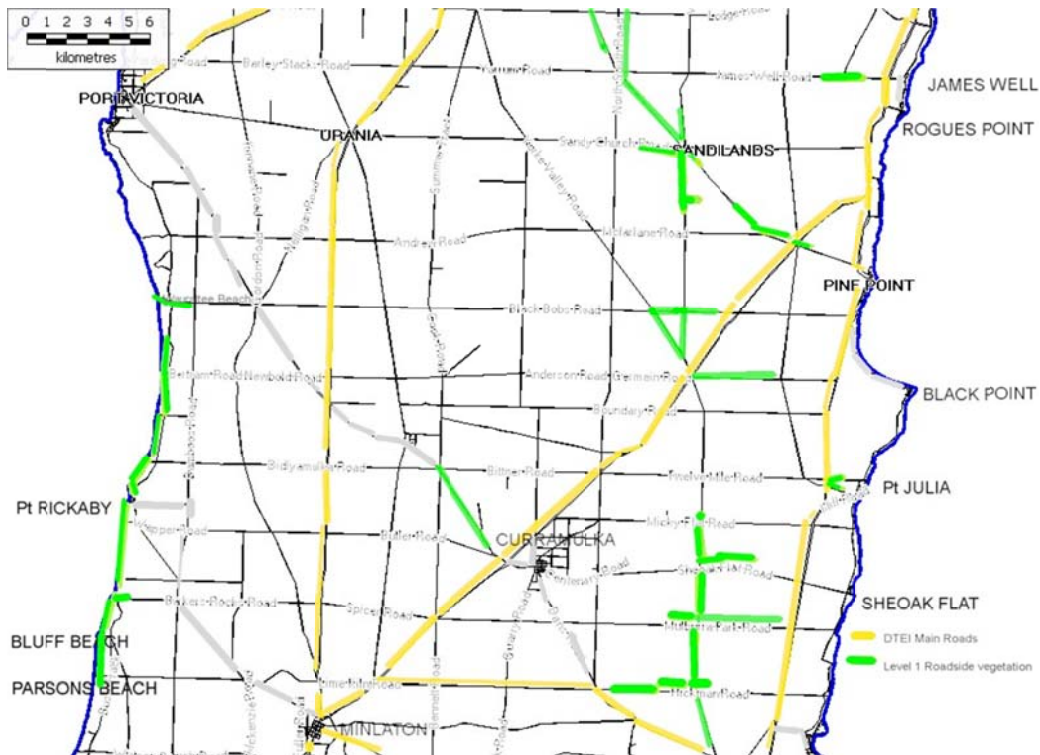
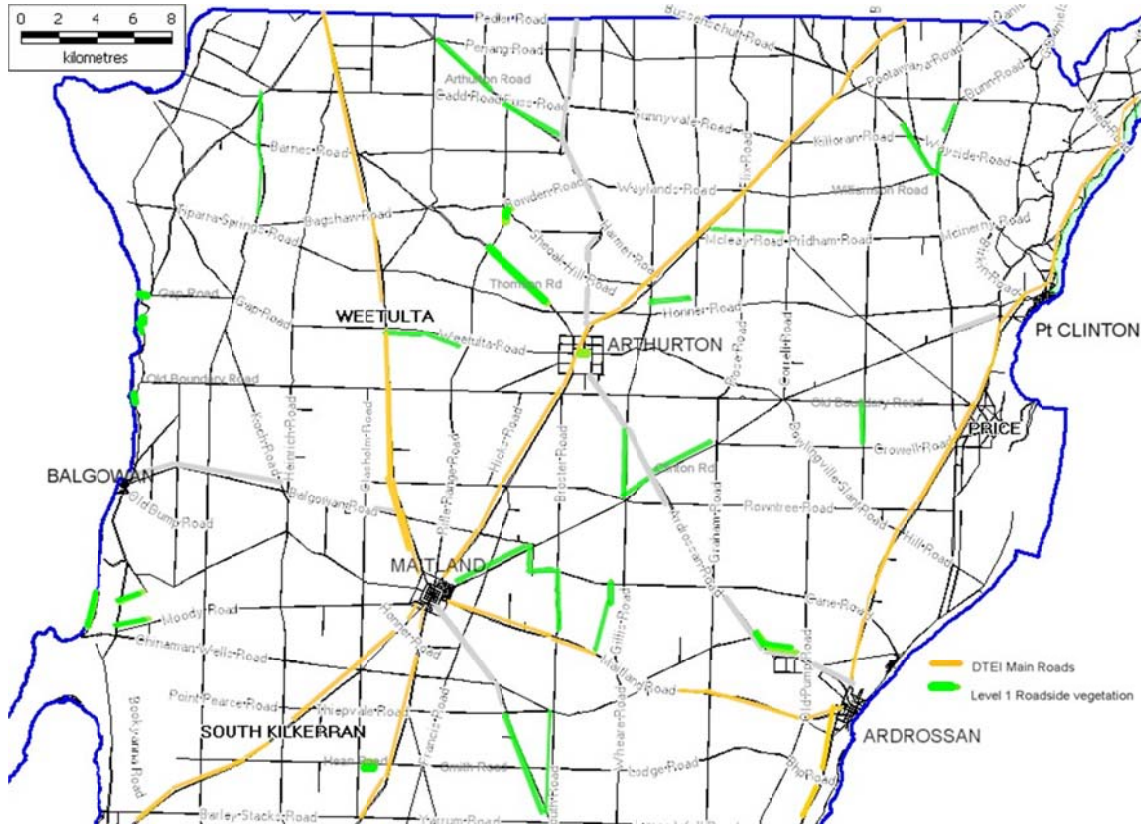
5. APPENDIX

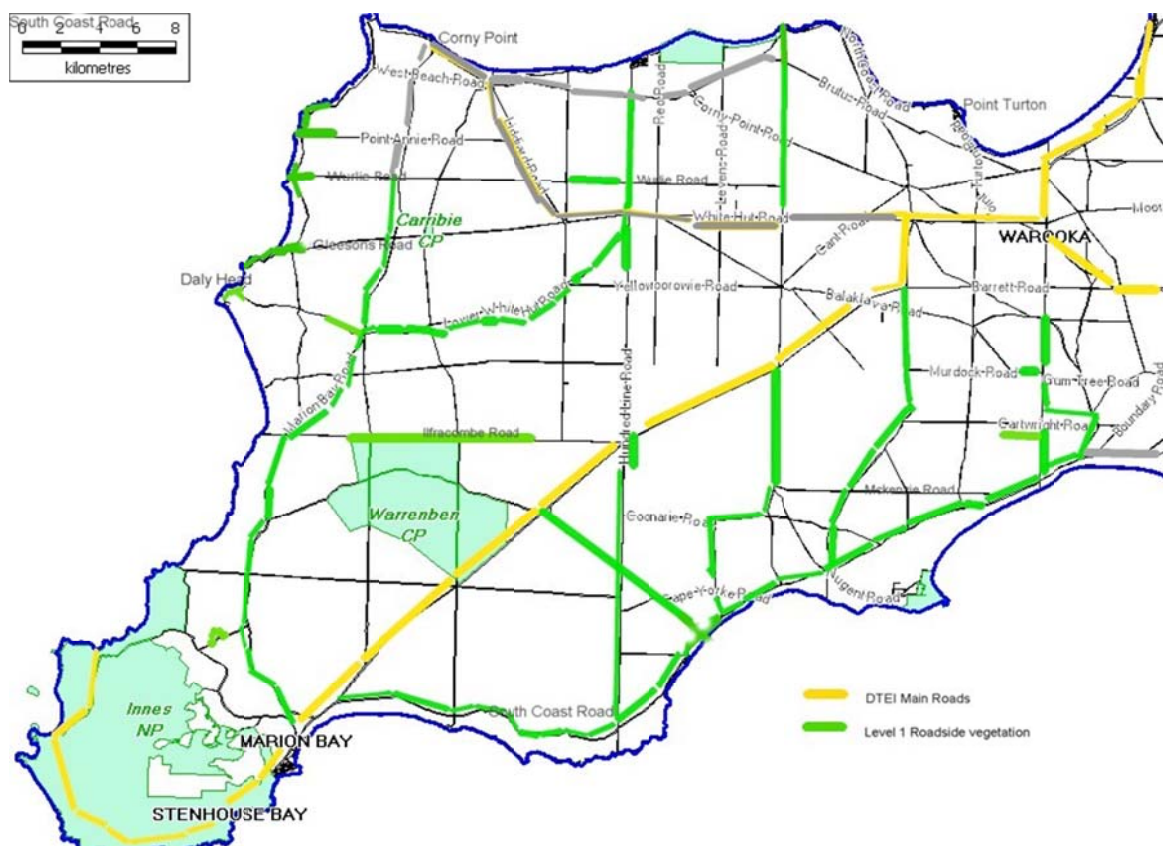
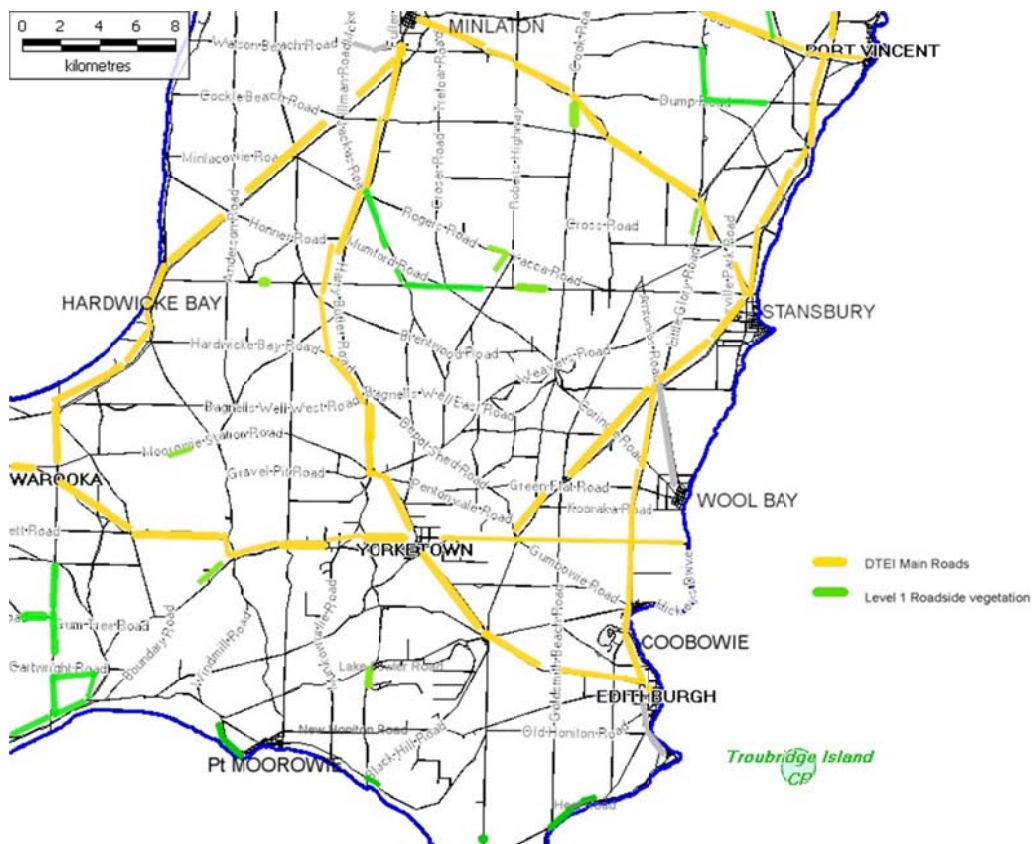
5.1. Appendix 1: Summary of State Legislation Relating to Roadside Management

The following (Commonwealth) Parliament Acts and Government policies are relevant to road maintenance activities for the protection and management of roadside vegetation. Electronic copies of State and Federal legislation can be found at <http://www.austlii.edu.au/>

<i>Aboriginal Heritage Act, 1988</i>
<i>Agricultural and Veterinary Products (Control of Use) Act, 2002</i>
<i>Controlled Substances Act, 1984</i>
<i>Crown Lands Act, 1929</i>
<i>Dangerous Substances Act, 1979</i>
<i>Environment Protection Act, 1993</i>
<i>Environment Protection and Biodiversity Conservation Act, 1999</i>
<i>Fire and Emergency Services Act, 2005</i>
<i>Heritage Places Act, 1993</i>
<i>National Parks and Wildlife Act, 1972</i>
<i>Native Vegetation Act, 1991</i>
<i>Natural Resources Management Act, 2004</i>

5.2. Appendix 2: Reference map for roadside classification





5.3. Appendix 3: SUMMARY of Legal Requirements under the Native Vegetation Act

NOTE: As well as the requirements under *Native Vegetation Act 1991*, ANY removal of roadside native vegetation needs local council approval and may require approval under other legislation, eg. *Environment Protection and Biodiversity Conservation Act 1999*.

If in doubt about any of these requirements, consultation with the relevant authority is recommended.

ACTIVITY	CLEARANCE APPROVAL	
	NOT REQUIRED (Does not require approval under the <i>Native Vegetation Act 1991</i>)	REQUIRED (Under Native Vegetation Regulation or clearance application to the NVC)
Maintenance	Maintenance of existing clearance with low impact methods	Increased clearance or high impact methods to be used
New Roadworks	Very minor clearance	All but very minor clearance
Pest Plant and Animal	Very. minor clearance e.g. pruning for access	All but very minor clearance
Bushfire Prevention	Maintenance of legally established existing breaks.	Any other clearance for fire prevention Unless in accordance with a District Bushfire Management Plan under the <i>Fire and Emergency Services Act 2005</i> , or through an application to the CFS Regional Prevention Officer
Fencelines	Trees on boundary; branches over/through fence; bushes within 1m if they are growing through fence	Any clearance exceeding standards
Access to Adjoining Land	Maximum 5m wide – normal access. Maximum 10m wide – machinery. (Careful site selection to minimise clearance)	Any clearance exceeding standards
Grazing (Leased Rds)	Long-standing grazing practices.	Any direct clearance or increased pressure on native vegetation through changed grazing
Grazing (general)	No native vegetation or only trees & exotic grasses present	Where understorey or regenerating veg. present
Removal of Plant Material	Dead vegetation other than that defined in the Native Vegetation Regulations	Live timber, flowers or other veg. removed eg. brush-cutting Clearance of dead plants of a class declared by Regulation to be included in the definition of native vegetation.
Maintaining Diversity		Any measures involving burning, lopping or other disturbance of native vegetation Any measures involving burning, lopping or other disturbance of native vegetation.

5.4. Appendix 4: Authorisation to collect fallen timber (Wood Permit)

SF017 AUTHORISATION TO COLLECT FALLEN TIMBER

Authorisation No :

Name :

Address :

Pursuant to Section 221 of the Local Government Act 1999, the bearer of this Authorisation, whose name appears above, is licensed to REMOVE ANY TIMBER WITHIN SPECIFIED COUNCIL ROAD RESERVES.

This Authorisation is valid for a period of twelve (12) calendar months, from _____ to _____ for which a fee of \$20.00 has been paid.

Conditions:

1. This Authorisation does not permit the cutting of live timber or the cutting down and/or removal of any standing tree (or attached branch) irrespective of whether the tree (or attached branch) is living or dead. Persons found guilty of cutting down any live timber or standing tree (or part thereof) on a public reserve, street or road will be liable to a penalty not exceeding \$5,000.00 plus the cost of the tree.
2. ***No collection is allowed on Level One Roads (highlighted in green) as per the attached maps. These are areas of high significance to the ecology of the Yorke Peninsula.***
3. Wood obtained must be for own private use by residents or property owners of the District Council of Yorke Peninsula and is not to be re-sold.
4. **No hollow logs** are to be cut, removed or tampered with in any way.
5. No cutting and or collection is to occur on Total Fire Ban days.
6. The Fire and Emergency Service Act Regulations must be adhered to when a chain saw is being used to collect wood during the Fire Danger Season.
7. When removing timber from the roadside, care needs to be taken not to damage any surrounding native vegetation.
8. The holder of this Authorisation agrees to indemnify and to 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 authorisation.
9. N.B. You must have this Authorisation in your possession at all times whilst you are in the process of collecting and/or removing any fallen timber from roadsides or reserves
10. **All conditions must be adhered to the 'satisfaction of Council'.**

.....

Date: / /

for

Chief Executive Officer

5.5 Appendix 5: Seed collecting permit

SF041 SEED COLLECTING PERMIT

This is to certify that _____

of _____

is hereby permitted to obtain seed from Council's roadsides and reserves for a twelve month period from
/ / to / / subject to the following conditions:-

1. Prior to collection, permission to collect native plant material must be granted from the Department of Environment and Natural Resources (DENR) and the applicant must comply with the Native Plant Material Collection Policy (application form and policy are available at http://www.environment.sa.gov.au/Plants_Animals/Permits_licences/Native_plants_in_the_wild/Collection_of_native_seeds_and_fruits or telephone (08) 8204 1910).
2. This permit must be carried by the collector and produced upon request from a Council officer or general inspector.
3. Care must be taken not to disturb the understorey, tree hollows, nesting sites or any other part of the surrounding environment.
4. Seed is NOT to be collected from an isolated tree.
5. Seed is to be collected from healthy trees only that have the same species within 20 metres.
6. Seed is to be collected from five or more seed trees of the same species spread at least 100 metres apart (ideally collection will occur from as many plants as possible).
7. Only as much seed as is required is to be collected while keeping damage to plants to a minimum.
8. No more than 20% of the fruit is to be removed from any one tree, unless your DENR permit states otherwise.
9. Precautions are to be taken to prevent spread of weed seeds and pathogens from one area to another by vehicles and pedestrians.
10. Precautions are to be taken to minimise roadside damage, especially during wet conditions.

ANDREW CAMERON

CHIEF EXECUTIVE OFFICER

5.6 Appendix 6: Recommended Native Plants for Gardens and Revegetation

DISTRICT COUNCIL OF YORKE PENINSULA RECOMMENDED NATIVE PLANTS FOR GARDENS & REVEGETATION

(THIS LIST INCLUDES ONLY THOSE SPECIES THAT ARE AVAILABLE FROM RETAIL AND/OR STATE FLORA NURSERIES)

TREES and SHRUBS

Botanical Name	Common Name	Form	NY P	CY P	SY P	Height (Mtr)	Spread (Mtr)	Flower Time	Flower Colour	NOTES
<i>Acacia argyrophylla</i>	Silver Mulga-bush	Large shrub		✓	✓	1-5	2-6	Wi, Sp	Yellow	
<i>Acacia brachybotrya</i>	Grey Mulga-bush	Large shrub	✓	✓	✓	2-4	1.5-4	Wi, Sp	Yellow	
<i>Acacia hakeoides</i>	Hakea Wattle	Shrub	✓	✓		2.5-4	3-5	Wi, Sp	Yellow	
<i>Acacia ligulata</i>	Umbrella Bush	Large shrub	✓	✓	✓	2-4	4-6	Sp	Yellow	
<i>Acacia longifolia ssp. sophorae</i>	Coastal Wattle	Large shrub			✓	2-5	4-8	Wi, Sp	Yellow	*Important to get correct subspecies* *ssp longifolia is invasive*
<i>Acacia notabilis</i>	Notable Wattle	Shrub	✓	✓		1-3	2-3	Wi, Sp	Yellow	
<i>Acacia nyssophylla</i>	Spine Bush	Shrub	✓	✓		1-3	2-3	Wi, Sp	Yellow	

<i>Acacia oswaldii</i>	Umbrella Wattle	Large shrub	✓	✓		3-5	3-5	Su	Yellow	
<i>Acacia paradoxa</i>	Acacia paradoxa	Large shrub		✓		2-4	3-4	Sp	Yellow	Prickly foliage, Inland heavier soils
<i>Acacia pycnantha</i>	Golden Wattle	Shrub	✓	✓		3-5	2-4	Wi, Sp	Yellow	Quick growing but dies young
<i>Acacia rigens</i>	Nealie	Shrub	✓	✓		2-4	2-4	Wi, Sp	Yellow	
<i>Acacia sclerophylla</i>	Hard-leaf Wattle	Shrub	✓	✓		1-2	2-4	Sp	Yellow	
<i>Acacia spinescens</i>	Spiny Wattle	Small shrub	✓	✓	✓	0.5-2	1-2	Wi, Sp	Yellow	Prickly foliage
<i>Adriana quadripartita</i>	Coastal Bitter Bush	Shrub	✓	✓	✓	1-2	1-2	Sp, Su	Red/Brown	
<i>Allocasuarina muelleriana</i>	Common Oak-bush	Small tree		✓	✓	1-3	2-3	Sp, Su	Insignificant	
<i>Allocasuarina pusilla</i>	Dwarf Sheoak	Shrub		✓	✓	1-2	1-2	Au, Wi, Sp	Insignificant	
<i>Allocasuarina verticillata</i>	Drooping Sheoak	Med tree	✓	✓	✓	5-8	4-6	Au, Wi	Insignificant	
<i>Bursaria spinosa</i>	Sweet Bursaria	Large shrub	✓	✓	✓	2-4	1-3	Su	White	Can have prickly foliage, fragrant
<i>Callistemon rugulosus</i>	Scarlet Bottlebrush	Shrub	✓	✓		2-4	2-4	Su	Red	Prefers heavier inland soils
<i>Callitris canescens</i>	Scrubby Cypress Pine	Large shrub		✓	✓	1.5-4	1.5-4		Insignificant	
<i>Callitris gracilis</i>	Southern Cypress Pine	Small tree	✓	✓		5-10	3-6		Insignificant	

<i>Calytrix tetragona</i>	Fringe Myrtle	Shrub	✓	✓	✓	1	1-1.5	Spring	White/Pink	Good for coastal garden
<i>Cheiranthra alternifolia</i>	Finger Flower	Small shrub	✓	✓	✓	0.6	0.3	Sp	Blue	
<i>Chrysocephalum apiculatum</i>	Common Everlasting	Small shrub	✓	✓	✓	0.5	0.2	Sp, Su	Yellow	
<i>Dillwynia hispida</i>	Red Parrot Pea	Small shrub		✓	✓	0.5	0.3-0.5	Sp	Orange/Red	
<i>Dodonaea hexandra</i>	Horned Hop Bush	Small shrub	✓	✓	✓	0.5	0.5-1.5		Insignificant	Insignificant flowers but fruits are colourful
<i>Dodonaea viscosa</i> ssp. <i>angustissima</i>	Narrow-leaf Hop-bush	Shrub	✓			2-4	2-4		Insignificant	
<i>Dodonaea viscosa</i> ssp. <i>spatulata</i>	Sticky Hop-bush	Shrub	✓	✓	✓	1.5-4	1.5-3		Insignificant	
<i>Eremophila glabra</i>	Tar Bush	Shrub	✓	✓	✓	1	1-2	All year	Yellow, Red, Orange	
<i>Eremophila longifolia</i>	Weeping Emubush	Large shrub	✓	✓		2-6	1.5-4	Wi, Sp, Su	Pink	Tends to sucker
<i>Eucalyptus brachycalyx</i>	Gilja	Mallee	✓	✓	✓	4-7	3-10	Sp	White	
<i>Eucalyptus calycogona</i>	Square-fruit Mallee	Mallee	✓	✓		3-10	3-8	Sp, Su	Cream/Pink	
<i>Eucalyptus diversifolia</i>	SA Coastal White Mallee	Mallee			✓	2-10	2-8	Wi, Sp	Cream	

<i>Eucalyptus dumosa</i>	White Mallee	Mallee	✓			4-8	4-5	Wi, Sp, Su	Cream	
<i>Eucalyptus gracilis</i>	Yorrell	Mallee	✓	✓	✓	3-9	3-8	Au, Wi, Sp	White	
<i>Eucalyptus incrassata</i>	Ridge-fruited Mallee	Mallee	✓	✓		3-7	3-6	Sp, Su	Cream	
<i>Eucalyptus leptophylla</i>	Narrow-leaf Red Mallee	Mallee	✓	✓	✓	2-6	3-8	Au, Wi, Sp	Cream	
<i>Eucalyptus oleosa</i>	Red Mallee	Mallee	✓	✓	✓	3-12	3-12	Wi, Sp	Cream	
<i>Eucalyptus phenax</i>	White Mallee	Mallee	✓	✓	✓	3-7	3-5	Su, Au	Cream	
<i>Eucalyptus porosa</i>	Mallee Box	Large Tree	✓	✓	✓	5-14	5-12	Sp	Cream	
<i>Eucalyptus rugosa</i>	Coastal White Mallee	Mallee			✓	4-5	4-5	Su	Cream	
<i>Eucalyptus socialis</i>	Beaked Red Mallee	Mallee	✓	✓	✓	4-8	4-8	Sp, Su	Cream, Yellow	
<i>Eutaxia microphylla</i>	Mallee Bush Pea	Small shrub	✓	✓	✓	0.5-1	1-1.5	Sp	Yellow, Brown	
<i>Goodenia varia</i>	Sticky Goodenia	Shrub	✓	✓	✓	0.1-0.6	0.5-1.5	Wi, Sp	Yellow	Good for coastal garden
<i>Grevillea huegelii</i>	Comb Grevillea	Shrub	✓	✓		0.5-2.5	1.5-3	Sp	Red	Prickly foliage
<i>Grevillea ilicifolia</i>	Holly-leaf Grevillea	Shrub	✓	✓		0.1-2	1-3	Wi, Sp, Su	Red	Prickly foliage

<i>Hakea mitchellii</i>	Heath Needlebush	Shrub	✓	✓		1-4	1-3	Wi	White	Prickly foliage
<i>Lasiopetalum baueri</i>	Slender Velvet Bush	Shrub	✓	✓	✓	0.5-1.5	1-2	Sp, Su	Pink, White	
<i>Lasiopetalum behrii</i>	Pink Velvet Bush	Shrub	✓	✓		0.5-1.5	1-2	Wi, Sp	Pink, White	
<i>Lasiopetalum discolor</i>	Coast Velvet Bush	Shrub		✓	✓	0.5-1.5	0.5-1.5	Wi, Sp	Pink, White	Good for coastal garden
<i>Lasiopetalum shulzenii</i>	Drooping Velvet Bush	Large Shrub			✓	1.5-3	0.5-2	Sp, Su	White	
<i>Leptospermum coriaceum</i>	Dune Tea-tree	Large shrub	✓	✓	✓	1-3	2-4	Wi, Sp	White	
<i>Leucophyta brownii</i>	Cushion Bush	Shrub	✓	✓	✓	0.3-1	1-1.5	Sp, Su	Yellow	Good for coastal garden
<i>Maireana sedifolia</i>	Bluebush	Shrub	✓			0.6-1.5	0.6-2	Wi, Sp	Yellow, Pink	Good for coastal garden
<i>Melaleuca acuminata</i>	Mallee Honey-myrtle	Large shrub	✓	✓	✓	2-4	2	Sp	Cream	
<i>Melaleuca decussata</i>	Cross-leaved Honey Myrtle	Large shrub		✓	✓	2-4	2-4	Sp, Su	Purple	
<i>Melaleuca halmaturorum</i>	Swamp Paper-bark	Large shrub			✓	2-6	2-6	Sp, Su	White	Normally grows in saline areas
<i>Melaleuca lanceolata</i>	Dryland Tea-tree	Small tree	✓	✓	✓	3-8	3-5	Sp, Su	Cream	
<i>Melaleuca uncinata</i>	Broombush	Large shrub	✓	✓	✓	2-3	1-2	Su	Yellow	
<i>Myoporum insulare</i>	Boobialla	Large shrub	✓	✓	✓	3-5	3-5	Sp	White	Tends to grow close to coast
<i>Myoporum platycarpum</i>	False Sandalwood	Small tree	✓	✓		3-6	2-4	Sp	White	

<i>Olearia axillaris</i>	Coast Daisy-bush	Large shrub	✓	✓	✓	2-3	1.5-3	Sp	White	Tends to grow close to coast
<i>Olearia floribunda</i>	Heath Daisy-bush	Shrub	✓	✓		0.5-2	1-1.5	Su	White	
<i>Olearia pannosa</i>	Silver-leaved Daisy	Shrub	✓	✓	✓	1-2	1-2	Sp	White	
<i>Olearia passerinoides</i>	Daisy Bush	Shrub			✓	1.5-2	1.5-2	Sp	White	
<i>Olearia pimeleoides</i>	Showy Daisy-bush	Small shrub			✓	0.5-1	0.5-1	Wi, Sp	White	
<i>Olearia ramulosa</i>	Twiggy Daisy-bush	Shrub		✓	✓	1-1.5	1-2	Sp, Su	White/Pink	
<i>Pelargonium australe</i>	Austral Storksbill	Small shrub	✓	✓	✓	0.3-0.7	0.5-1.5	Sp, Su, Au	Pink	Good for coastal garden
<i>Pimelea glauca</i>	Smooth Rice Flower	Small shrub	✓	✓	✓	0.5-1	0.3-1.5	Wi, Sp, Su	White	
<i>Pittosporum angustifolium</i>	Native Apricot	Small/med tree	✓	✓	✓	4-8	3-4	Sp	Cream	
<i>Prostanthera serpyllifolia</i> ssp <i>microphylla</i>	Small-leaved Mintbush	Small shrub	✓	✓	✓	0.5	0.5	Wi, Sp	Red	
<i>Santalum acuminatum</i>	Quandong	Large shrub	✓	✓	✓	3-6	1-3	Su	Cream	Semi-parasitic – requires host plant

<i>Scaevola crassifolia</i>	Cushion Fanflower	Shrub	✓	✓	✓	1	1	Sp,Su	Blue	Good for coastal garden
<i>Senna artemisioides spp.</i>	Senna	Shrub	✓	✓	✓	1-3	1-3	Sp	Yellow	
<i>Templetonia retusa</i>	Cockies Tongue	Shrub			✓	1-2	1.5-2	Au, Wi	Red	
<i>Tetradlea pilosa</i>	Pink-eyed Susan	Small shrub			✓	0.2-0.5	0.2-0.5	Sp, Su	Pink	
<i>Thomasia petalocalyx</i>	Paper Flower	Small Shrub			✓	0.6	0.6	Sp,Su	Pink	Good for coastal garden
<i>Wahlenbergia stricta</i>	Native Bluebells	Herb		✓	✓	0.3-0.6	0.3	Frequent	Blue	
GROUNDCOVERS										
<i>Atriplex semibaccata</i>	Berry Saltbush	Groundcover	✓	✓	✓	0.1-0.3	1-3	All year	Insignifican t	
<i>Carpobrotus rossii</i>	Karkalla or Native Pigface	Groundcover	✓	✓	✓	0.1	1.5	Wi, Sp, Su	Purple	Good for coastal garden
<i>Dampiera rosmarinifolia</i>	Wild Rosemary	Groundcover	✓	✓	✓	0.2-0.7	0.5-1	Frequent	Pink	

<i>Disphyma crassifolium</i>	Round-leaved Pigface	Groundcover	✓	✓	✓	0.5	1	Sp	Pink	Normally grows in saline areas Good for coastal garden
<i>Einadia nutans</i>	Nodding Saltbush	Groundcover	✓	✓	✓	0.5	1	Sp	Insignifican t	Good for coastal garden
<i>Frankenia pauciflora</i>	Southern Sea Heath	Groundcover	✓	✓	✓	0.1	1	Sp	Pink	Normally grows in saline conditions Good for coastal garden
<i>Halgania cyanea</i>	Mallee Blue Flower	Groundcover	✓	✓	✓	0.3-0.8	0.5-1.5	Sp	Blue	
<i>Kennedia prostrata</i>	Running Postman	Groundcover	✓	✓	✓	0.1	1.5-3	Wi, Sp	Red, Yellow	Tends to die back after flowering
<i>Myoporum parvifolium</i>	Creeping Boobialla	Groundcover	✓	✓	✓	0.3	2	Sp, Su	White	Good for coastal garden
CLIMBERS										
<i>Billardiera cymosa</i>	Sweet Apple Berry	Climber	✓	✓	✓		1-4	Sp	Blue	
<i>Clematis microphylla</i>	Old Man's Beard	Climber	✓	✓	✓		2-4	Wi, Sp	White	
<i>Hardenbergia violacea</i>	Native Lilac	Climber	✓		✓	1.5-2	2-3	Wi, Sp	Purple	

GRASSES, RUSHES, SEDGES & other STRAP-LEAVED PLANTS

<i>Aristida behriana</i>	Brush Wiregrass	Grass	✓			0.15-0.3	0.2-0.3	Warm Season		Trim back after flowering and seeding
<i>Austrodanthonia caespitosa</i>	Common Wallaby Grass	Grass	✓	✓		0.2-0.8	0.1-0.3	Cool Season		Trim back after flowering and seeding
<i>Austrodanthonia geniculata</i>	Knead Wallaby Grass	Grass	✓	✓	✓	0.1-0.5	0.1-0.3	Cool Season		Trim back after flowering and seeding
<i>Austrostipa elegantissima</i>	Elegant Spear-grass	Grass	✓	✓	✓	1	1	Cool Season		Trim back after flowering and seeding
<i>Austrostipa mollis</i>	Spear Grass	Grass	✓	✓		0.5	0.5	Cool Season		Trim back after flowering and seeding
<i>Austrostipa nitida</i>	Balcarra Grass	Grass	YP			0.7	0.5	Cool Season		Trim back after flowering and seeding
<i>Austrostipa nodosa</i>	Spear Grass	Grass	YP			1	1	Cool Season		Trim back after flowering and seeding
<i>Bothriochloa macra</i>	Red Leg Grass	Grass	✓	✓	✓	0.4-0.8	0.4-0.8	Warm Season		Trim back after flowering and seeding
<i>Chloris truncata</i>	Windmill Grass	Grass	✓	✓		0.3-0.5	0.2-0.5	Warm Season		Trim back after flowering and seeding

<i>Dianella brevicaulis</i>	Short-stem Flax-lily	Lily	✓	✓	✓	0.3-0.5	0.5-2	Sp, Su	Purple	
<i>Dianella revoluta</i>	Black-anther Flax-lily	Lily	✓	✓	✓	0.3-1	0.5-2	Sp, Su	Purple	
<i>Enneapogon nigricans</i>	Bottle Washers	Grass	✓			0.2-0.5	0.5	Warm Season		Trim back after flowering and seeding
<i>Isolepis nodosa</i> (now <i>Facinia nodosa</i>)	Knobby Club Rush	Rush/Sedge	✓	✓	✓	0.5-1.5	0.5-2	Frequent	Brown	
<i>Lomandra densiflora</i>	Pointed Mat-rush	Lily	✓	✓	✓	0.2-0.6	0.2-0.6	Wi, Sp	Green	
<i>Lomandra effusa</i>	Scented Mat-rush	Lily	✓	✓	✓	0.2-0.5	0.2-0.5	Wi, Sp	Cream	Prickly foliage
<i>Lomandra micrantha</i>	Small-flowered Mat-rush	Lily		✓	✓	0.2-0.8	0.2-0.8	Au, Wi, Sp	White	
<i>Lomandra multiflora ssp dura</i>	Many-flowered Mat-rush	Lily	✓	✓	✓	0.2-0.8	0.75	Wi, Sp, Su	Cream	
<i>Poa labillardiera</i>	Tussock Grass	Grass		✓	✓	0.3-1	0.3-0.7	Cool Season		Good for coastal garden Trim back after flowering and seeding
<i>Poa poiformis</i>	Blue Tussock Grass	Grass	✓	✓	✓	0.6-1.2	0.5-1.5	Cool Season		Good for coastal garden Trim back after flowering and seeding

<i>Themeda triandra</i>	Kangaroo Grass	Grass	✓	✓	✓	0.4-1.5	0.5	Warm Season		Trim back after flowering and seeding
<i>Triodia irritans</i>	Porcupine Grass	Grass	✓	✓	✓	0.6	1	Warm Season		Very prickly!

THIS LIST HAS BEEN PREPARED WITH THE ASSISTANCE OF THE NORTHERN & YORKE NATURAL RESOURCE MANAGEMENT BOARD

**THIS LIST INCLUDES ONLY THOSE SPECIES THAT ARE AVAILABLE FROM RETAIL AND/OR STATE FLORA NURSERIES
PLANT GROWTH INFORMATION IS A GUIDE ONLY – GROWTH CHARACTERISTICS WILL ALTER WITH SOIL TYPE, RAINFALL AND OTHER
ENVIRONMENTAL FACTORS**

PLEASE CONSULT YOUR NURSERY OR SUPPLIER FOR MORE SPECIFIC INFORMATION

SURVEY YOUR SURROUNDING BUSHLAND AND ROADSIDES TO FIND OUT WHICH PLANTS GROW LOCALLY AND THEIR GROWTH CHARACTERISTICS