



Final

CODE OF PRACTICE FOR ROADSIDE CONSERVATION AND ROAD MAINTENANCE

prepared by

SHIRE OF DENMARK

with assistance from the

ROADSIDE CONSERVATION COMMITTEE

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CODE OF PRACTICE FOR ROADSIDE CONSERVATION AND ROAD MAINTENANCE

The Code of Practice for Roadside Conservation and Road Maintenance (RCoP) has been prepared for Shire managed roads only within the Shire of Denmark municipality.

Roadside Conservation Code of Practice (RCoP) Aim

The aim of the Shire of Denmark Code of Practice for Roadside Conservation and Road Maintenance (RCoP) is to balance road design, safety and construction with identified roadside conservation values.

Roadside Conservation Code of Practice (RCoP) Objectives

The broad objectives identified to assist in the preparation of the Denmark RCoP are to:

- ensure compliance with all legislative requirements in managing road reserves;
- ensure road safety through the safe function of the road;
- protect the road formation;
- prevent further land degradation on roadsides and improve water quality;
- minimise the risk and impact from fire;
- protect service assets located on roadsides;
- protect, maintain, and enhance native vegetation communities on roadsides;
- protect rare, threatened and significant species of flora and fauna on roadsides;
- maintain and enhance habitat and corridor requirements for native fauna on roadsides;
- prevent the further spread of weeds and soil borne fungal pathogens on roadsides;
- protect the cultural and heritage values of roadsides; and
- maintain and enhance the visual amenity and landscape quality of the road and roadside.

Roadside Code of Practice and Guidelines for Implementation

1. Roadside Maintenance - RCoP

- (1) That the Shire ensures that works being undertaken on roadsides on the following activities:
 - (a) road safety;
 - (b) fire prevention; and
 - (c) efficient and effective installation and maintenance of essential services are conducted giving due regard for reasonable protection and enhancement of native vegetation.
- (2) That local native vegetation beyond the road formation is not disturbed during road maintenance works except where necessary to carry out required works.
- (3) That the Shire ensures that all staff involved in road construction works and roadside management practices are instructed in the correct techniques for minimising disturbance to native roadside vegetation.
- (4) That conservation values be determined for all roadsides within the Shire in accordance with advice from the Roadside Conservation Committee.

1. Roadside Maintenance – Guidelines for Implementation

- (a) Any persons undertaking works within the road reserve will be advised that native vegetation beyond the road formation is not to be disturbed except where a permit has been issued or an exemption negates this requirement. Additional conditions may be imposed to prevent damage of native vegetation. *Refer to Environmental Protection (Clearing of Native Vegetation) Regulations 2004.*
- (b) Due consideration is to be given to the type of equipment and machinery used.
- (c) On roadsides with native vegetation, wherever possible, machinery is to operate from the road formation while carrying out works (NB: the road formation is defined as the area from the top of the batter on either side of the road see Appendix 1B).
- (d) Table drains are to be maintained in a condition that will prevent water flooding the road. When carrying out maintenance of table drains, spoil is to be directed towards the road pavement for removal.
- (e) Materials used for road operations on roads with native vegetation are to be temporarily stock-piled on the road formation or on an existing cleared area, not on native vegetation.
- (f) Relevant stakeholders (Telstra, Western Power, local Bush Fire Brigades (BFB) and Main Roads WA) and other relevant agencies will be made aware of Denmark's RCoP and special environmental areas and significant areas for flora and fauna. *Refer to Special Environmental Areas in Transport Corridors.*
- (g) Road construction supervisors and relevant staff will be encouraged to attend seminars or courses related to roadside management conducted by TAFE, the RCC or other organisations as approved by the relevant Director. *Refer to RCCs Handbook of Environmental Practice for Road Construction and Maintenance Works.*
- (h) In determining conservation values of roadsides, the Shire will be guided by the RCC classification of roadsides as category 1 high conservation value, category 2 medium-high conservation, category 3 medium-low conservation value and category 4 low conservation value. *Refer to Assessing Roadsides*.

2. Clearing of Native Vegetation - RCoP

- (1) A permit is required (unless undertaking exempt activities) to be obtained where clearing of native vegetation is to be undertaken:
 - within the existing formation for vegetation older than 10 years
 - beyond the back slope (batter) in the roadside (upgrade)

A clearing permit is not required in the existing road formation for maintenance works where native vegetation has been previously cleared within the last ten year period.

Refer to Schedule 2 of Environmental Protection (Clearing of Native Vegetation) Regulations 2004.

- (2) Where a permit has been granted to clear any native vegetation (through direct removal or other means) the Shire is to ensure that no native vegetation other than that specified is destroyed or disturbed and that clearing is undertaken in accordance with the permit conditions. *NB: Removal of dead trees and fallen timber from roadsides may require a permit from DEC.*
- A permit to take may be required where road maintenance activities extend into Special Environmental Areas (SEA's), Environmentally Sensitive Area's (ESA's), and/or Declared Rare Flora (DRF)). A permit to take can be acquired via an application to take process through the Department of Environment and Conservation (Frankland District).

2. Clearing of Native Vegetation – Guidelines for Implementation

- (a) Shire staff to familiarise themselves with the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* and Clause 5.11 of the *Shire of Denmark Local Law Activities on Thoroughfares and Trading in Thoroughfares and Public Places 2001,* to ensure permits are obtained where necessary.
- (b) Any request to remove dead trees or fallen timber from a strategic biodiversity corridor or roadside with high conservation value will be inspected prior to granting a permit to assess the accessibility of the timber and the availability of other ground level features to provide habitat for small native animals. Permits for these activities may be required from DEC.
- (c) The Shire is to maintain a database (shape file) of ESA's, TEC's, and declared rare flora, to be referred to where road construction and upgrade activities are to occur on all road reserves within the Shire. This information, in an appropriate format, is to be provided to the Shire's Operational Staff for use.

3. Fire Management - RCoP

- (1) That the Shire encourage its staff, the Bush Fire Advisory Committee, relevant fire management authorities (Fire and Emergency Services Authority) and private property owners to consider:
 - (a) maintenance of clear sight distances;
 - (b) significance of a fire hazard;
 - (c) vegetation type;
 - (d) conservation value of the roadside;
 - (e) the Shire of Denmark Local Law Activities on Thoroughfares and Trading in Thoroughfares and Public Places 2001 Part 5 – Roadside Conservation Division 6 and 7– Fire Management and Firebreaks
 - (f) the *Biodiversity Conservation and Fire in Road and Rail Reserves: Management Guidelines (2011)*

when providing recommendations and implementing actions regarding fire prevention and fire management works.

3. Fire Management– Guidelines for Implementation

- (a) i)The Shire, in conjunction with the RCC and DEC will provide a plan showing all strategic biodiversity corridors and make it available for staff, the Bush Fire Advisory Committee, relevant advisory bodies (Fire Emergency Services Authority) and community.
 - ii) Where strategic biodiversity corridors have been identified every endeavour shall be made to avoid and protect these areas during fire prevention works.
- (b) The local fire services will be advised of recommended management actions where there is the presence of rare, vulnerable and/or significant flora and fauna habitats located along strategic firebreaks, to ensure biodiversity values are not adversely impacted upon.
- (c) The local fire services will be encouraged to utilise other alternatives where possible for strategic fire breaks, to avoid populations of significant flora and fauna habitats and/or strategic biodiversity corridors.
- (d) Where a roadside has significant vegetation on one side only, fire prevention works will be carried out on the side without important vegetation where this is appropriate.
- (e) The location and extent of all fire prevention works will be reviewed annually and take into account rare, significant and vulnerable flora and fauna areas.
- (f) The use of prescribed burning, fire breaks and manual fuel removal techniques may be used as appropriate methods of fire prevention works on thoroughfares with consent of the Shire.
- (g) All personnel involved in fire prevention and fire management activities to become familiar with and adhere to the *Shire of Denmark Local Law Activities on Thoroughfares and Trading in Thoroughfares and Public Places 2001 Part 5 Roadside Conservation Division 6 and 7– Fire Management and RCCs Firebreaks* and the *Biodiversity Conservation and Fire in Road and Rail Reserves: Management Guidelines (2011).*

4. Special Environmental Areas - RCoP

- (1) All rare or priority and significant flora and fauna areas, Environmentally Sensitive Areas (ESA's), threatened ecological communities (TEC's), and declared Flora Roads on roadsides be recorded and clearly identified. Such sites are to be protected prior to any works being carried out. Refer to Shire of Denmark Local Law Activities on Thoroughfares and Trading in Thoroughfares and Public Places 2001 Part 5 Division 2 and 3 and Flora Road Management Plan 2012.
- (2) That the Shire consult with the Roadside Conservation Committee (RCC) and/or the Department of Environment and Conservation (DEC) regarding the appropriate management of roadside areas where a rare, priority or significant flora species have been identified. *Refer to RCCs Special Environmental Areas in Transport Corridors*.
- (3) That special environmental areas within roadsides be identified and marked in accordance with Clause 5.8 of *Shire of Denmark Local Law Activities on Thoroughfares and Trading in Thoroughfares and Public Places 2001*, and consistent with the procedure outlined by DEC for selection, signing and management where appropriate.

4. Special Environmental Areas – Guidelines for Implementation

- (a) A register to be maintained and held in Shire's GIS database showing:
 - threatened flora
 - fauna sightings and associated habitat
 - Environmentally Sensitive Areas (ESA's)
 - Threatened Ecological Communities (TEC's)
 - Declared Flora Roads
 - and this register will be referred to prior to approval being given to any works on roadsides. This information, in an appropriate format, is to be provided to the Shire's Operational Staff for use.
- (b) Ensure the Environmental Impact Assessment Checklist is completed prior to commencement of road maintenance and/or construction activities to ensure compliance with existing legislative requirements and continued protection of special environmental areas.

5. Biodiversity Corridors - RCoP

- (1) Strategic biodiversity corridors should be identified and protected where possible, for faunal and floral movement and habitat.
- (2) The Shire will support enhancement of roadsides for retention of biodiversity corridors whilst giving consideration to road safety where revegetation is within the road reserve.

5. Biodiversity Corridors – Guidelines for Implementation

- (a) Strategic biodiversity corridors along roadsides can be identified through use of data obtained from aerial photographs, RCC roadside survey mapping data, and Greening Plan spatial data. This information, in an appropriate format, is to be provided to the Shire's Operational Staff for use.
- (b) The DEC Frankland District Nature Conservation Co-ordinator can be consulted prior to any roadside works commencing along strategic biodiversity corridors.
- (c) Revegetation and rehabilitation can be undertaken utilising resources of the Shire revegetation nursery, using local native plant species (local provenance where possible).

6. Invasive Species - RCoP

- (1) Road maintenance and construction is to be conducted in a sensitive manner ensuring there is no further spread of invasive weed species and pathogens from operational road works activities. For pathogens refer to: Town Planning Scheme Policy No. 1 for Dieback Disease Management.
- (2) A weed eradication and control program is to be implemented to control invasive weeds on roadsides in accordance with the *Operational Roadside Reserve Plan* as outlined within the *Shire of Denmark Weed Strategy and Action Plan 2005-2010*, with due consideration given to the 'Do-Not-Spray-My Verge' Register.
- (3) The Shire to develop and implement a program to control environmental weeds (with an emphasis on those weed species listed in the *Shire of Denmark Local Law Relating to Pest Plants 1997.* The weed eradication program to focus on roadsides which act as a biodiversity corridor, and on roadsides with a high conservation value, as informed by the RCC roadside vegetation survey mapping, Greening Plan and verification through other source materials as required.
- (4) Following weed eradication and control works on road reserves, the area is to be revegetated with local native plant species to ensure the roadside is stabilised and will discourage re-infestation of weed species.
- (5) Where pest animals are harbouring in roadsides, the Department of Agriculture and Food WA (DAFWA) or DEC should be contacted to give appropriate advice on control measures.

6. Invasive Species – Guidelines for Implementation

- (a) Best practice management shall be employed in all road maintenance and construction activities. For high conservation areas those practices include but are not limited to:
 - hygiene management protocols adhered to (machinery and plant equipment clean on entry and exit to works site)
 - minimal disturbance of vegetation and soil to limit the opportunity for weed invasion and spread of pathogens (e.g. dieback)
 - all material utilised for road-works activities to be treated (dieback-free)
 - appropriate disposal of infected material (weed species debris)
 - training of relevant staff in dieback and weed identification and management Refer to Town Planning Scheme Policy No. 1 for Dieback Disease Management and RCC Environmental Code of Practice for Road Construction and Maintenance Works.
- (b) A GIS database of weed species occurrence on roadsides to be developed and maintained to assist with development and implementation of weed eradication and control program on roadsides. This information, in an appropriate format, is to be provided to the Shire's Operational Staff for use.
- (c) Where pest plants and animals are required to be eradicated from roadsides (includes those of high conservation value and biodiversity corridors) weed eradication and control work is to be carried out in a manner, which will cause minimal damage to native vegetation.
- (d) Control of pest plants and animals on roadsides should have regard to the pest plant and pest animal strategies developed by DAFWA and DEC.

7. Rehabilitation and Revegetation - RCoP

- (1) The Shire to support enhancement of roadside vegetation through rehabilitation and revegetation activities whilst giving consideration to road safety where revegetation is within the road reserve.
- (2) That prior to any approval being given for revegetation or natural regeneration projects on roadsides, consultation is to occur across directorates so that the Shire can ensure that:
 - (a) the project is compatible with various roadside codes of practice and guidelines;
 - (b) revegetation will not interfere with any current or future service provision;
 - (c) all services can be clearly marked and identified on the ground;
 - (d) the type of weed control is appropriate to the site;
 - (e) native vegetation is being used;
 - (f) the group initiating the planting or regeneration is able to maintain the plants until they are large enough to look after themselves;
 - (g) long term maintenance of the site has been adequately considered.
- (3) That the Shire consults with all relevant agencies (including but not limited to Bush Fire Brigade Advisory Committee, Western Power, Telstra and DEC) prior to approving revegetation and/or rehabilitation projects on roadsides in accordance with Clause 5.9 of *Shire of Denmark Local Law Activities on Thoroughfares and Trading in Thoroughfares and Public Places 2001*, where it states that a permit is required to plant species within a thoroughfare.
- (4) Any naturally regenerating native vegetation should be protected where practicable and managed in such a way to prevent interference with the structure of the road or other important roadside activities.
- (5) That the use of native fire retardant vegetation be encouraged in any revegetation projects adjacent to strategic fire breaks access tracks.

7. Rehabilitation and Revegetation – Guidelines for Implementation

- (a) Revegetation and rehabilitation can be undertaken utilising resources of the Shire revegetation nursery, using local native plant species (local provenance where possible).
- (b) Revegetation projects should, where practicable, be referred to all relevant agencies and stakeholders. If no response has been received within thirty days, it will be assumed that the agency has no objection to the project.
- (c) Native vegetation will not be permitted to regenerate if it is likely to grow into the maintenance zone or if it may obstruct visibility for traffic.
- (d) The list of native fire retardant vegetation be provided to those groups wishing to undertake approved revegetation projects along, or adjacent to, strategic fire break access tracks.

8. Community Education - RCoP

- (1) That the Shire raises awareness and highlights the importance of protecting and enhancing roadside vegetation consistent with the objectives of:
 - (i) road safety;
 - (ii) fire prevention;
 - (iii) efficient and effective maintenance of essential services;
 - (iv) wildlife habitat requirements;
 - (v) landcare objectives;
 - (vi) local tourism;
 - (vii) biodiversity values.
- (2) That the Shire encourage individual and community rehabilitation and revegetation projects with special emphasis on enhancing biodiversity corridors.

8. Community Education – Guidelines for Implementation

- (a) Actively promote roadside conservation environmental education activities and incorporate conservation goals into future planning and community information initiatives.
- (b) Revegetation projects involving seed collection from thoroughfares to be undertaken in accordance with Clause 5.20 of the *Shire of Denmark Local Law Activities on Thoroughfares and Trading in Thoroughfares and Public Places 2001.*

REVIEW OF DOCUMENT

Document is to be reviewed annually, or as required, jointly by the Planning & Sustainability Directorate and Infrastructure Services Directorate.

USEFUL REFERENCES

- Environmental Protection (Clearing of Native Vegetation) Regulations 2004
- Shire of Denmark Local Law Activities on Thoroughfares and Trading in Thoroughfares and Public Places 2001
- Shire of Denmark Local Law Relating to Pest Plants 1997
- Town Planning Scheme Policy No. 1 for Dieback Disease Management
- Operational Roadside Reserve Plan Shire of Denmark Weed Strategy and Action Plan 2005-2010
- Declared Flora Roads Management Plan (Shire of Denmark)
- Shire of Denmark Environmental Impact Assessment Checklist
- Biodiversity Conservation and Fire in Road and Rail Reserves: Management Guidelines (Roadside Conservation Committee, 2011)
- Assessing Roadsides: A Guide For Rating Conservation Value (Roadside Conservation Committee, 2002)
- Special Environmental Areas in Transport Corridors (Roadside Conservation Committee, 2000)
- Denmark Greening Plan

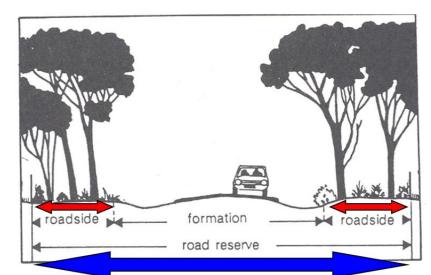
APPENDIX 1: ROAD FORMATION - 1(A)

Where is the Roadside?

The <u>road reserve</u>:



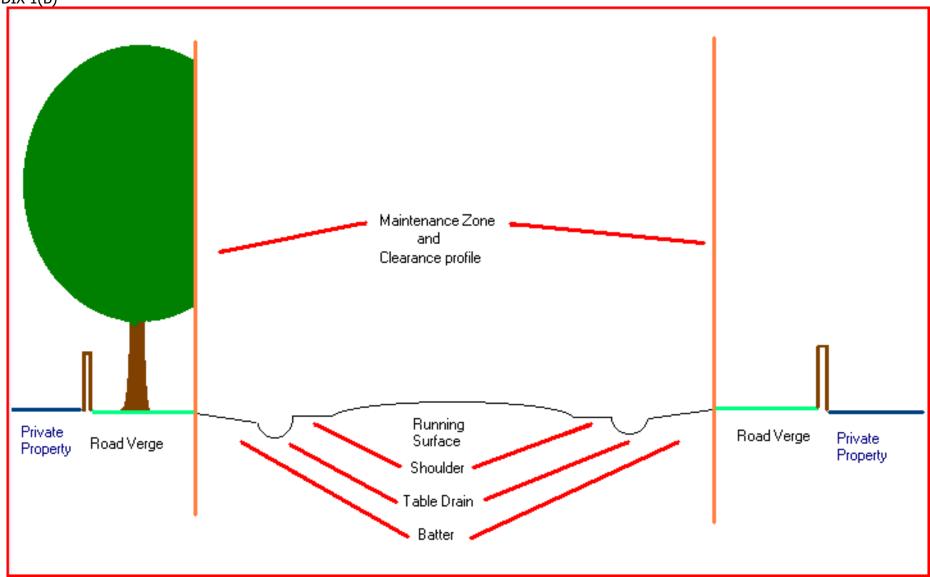
- -road surface;
- shoulder;
- drain; and
- batter/back slope.

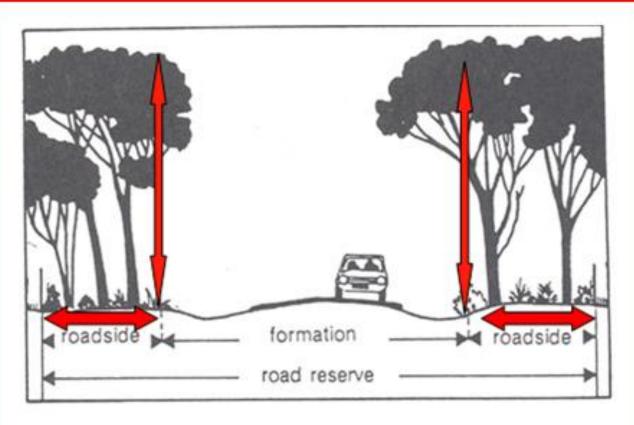


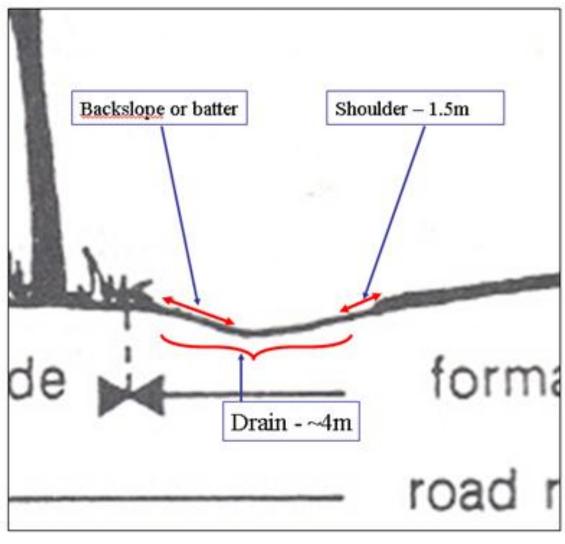
The remaining space is the <u>roadside</u>.



APPENDIX 1(B)







Declared Rare Flora and Road Maintenance

What is Declared Rare Flora?

Declared Rare Flora species are wild plant species that have been adequately searched for but are rare, in danger of extinction or need special protection.

Many Declared Rare Flora species are only known from a few hundred, or less, mature plants in the wild and some only from one or two sites. Road verges often provide important habitats for rare flora, especially in shires where extensive clearing has occurred for agriculture, housing, roads and amenities.

Declared Rare Flora and the law

Declared Rare Flora species are protected under the Wildlife Conservation Act 1950, which states that any designated Declared Rare Flora shall not be taken. For this purpose, the words 'to take' means 'to gather, pluck, cut, pull up, destroy, dig up, remove or injure the flora or to cause or permit the same to be done by any means'.

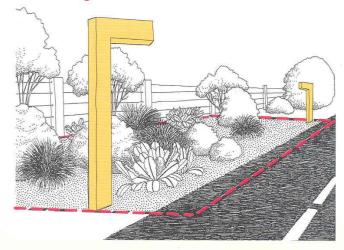
The only way Declared Rare Flora may be taken lawfully is to apply for a permit, which must be approved by the the Minister for the Environment. Applications for permits are free and can be arranged by contacting your local Department of Conservation and Land Management office or CALM Wildlife Branch on (08) 9334 0455. Applications are assessed on their effect on the conservation of the species as a whole and require at least six to eight weeks to be processed. A penalty of up to \$10,000 applies to Declared Rare Flora that is taken without a permit.

How do I know where Declared Rare Flora grows on roadsides?

Declared Rare Flora sites on roadsides are generally marked with two yellow markers which are bent to face towards each other as shown in the illustration. These markers are commonly known as 'Hockey sticks' or DRF markers.

DRF markers indicate that Declared Rare Flora occurs somewhere along the roadside between the markers. If work is proposed around these markers and your manager has not identified the presence of Declared Rare Flora or given you instructions on carrying out works, contact your manager before proceeding.

Continuing road works without obtaining



a permit may break the law and jeopardise a critically endangered plant population.

Each time a new population of Declared Rare Flora is found, formal notifications are delivered to the appropriate landowners and managers. So, even if no DRF markers are present on the roadside, your Works Manager will be able to inform you of any Declared Rare Flora sites in the shire.

Declared Rare Flora is given special protection under State and Federal legislation to prevent extinction and to maintain biodiversity. Everyone is responsible for protecting Declared Rare Flora for the future.

