Title:	4.26 Road Reserve Weed Control
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Statutory Environment:	Environmental Protection Act 1996; Native Vegetation Act 1991; Environmental Protection (Clearing of Native Vegetation) Regulations 2004; Agriculture and Related Resources Protection Act 1976
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Objectives

- To eradicate weed populations along local Road Reserves
- Encourage Shire Works employees and landholders to adhere to industry guidelines and standards as specified in relevant codes of practice and other documents for weed control on roadside verges.
- Encourage Local Landholders to conduct appropriate management plans
- To reduce the risk of fire in the road reserves.
- Reduce the inconvenience of vermin such as rabbits and foxes.
- To comply with government legislation including the Environmental Protection Act 1986.

Definitions

Weed

A weed is a plant that represents a threat to the conservation values of natural ecosystems. Weeds invade native plant communities and out-compete them causing a reduction in plant diversity and resulting in a loss of habitat for native animals.

Road Reserve

The road reserve includes the road, remnant vegetation up to an adjacent properties fence line.

Landholders

The holder or proprietor of land.

Environmentally sensitive area

There are a number of areas around Western Australia of environmental significance within which the exemptions in the Clearing Regulations do not apply. These areas are referred to as environmentally sensitive areas (ESAs), and are declared under section 51B of the EP Act and described in the Environmental Protection (Environmentally Sensitive Areas) Notice 2005.

1. Areas of application for this policy

This policy applies to Roadside Reserves within the Shire of Goomalling.

5. Additional policy measures

5.1 General weed management for Council Employees

5.1.1 Herbicide spraying

Off-target spraying may kill native understory and create an altered environment for weeds to invade. Risk can be minimised by:

- restricting spraying to the road shoulder and around road furniture,
- not spraying on wet or windy days,
- · not using residual herbicides along watercourses, and
- not using non-selective herbicides near susceptible plants.

5.1.2 Alternative weed control strategies

Weeds can be managed using many different methods. The most effective management of weeds is usually achieved by a combination of methods with follow-up over a number of years. The stage that a weed has reached in the invasion process determines the best approach for its control.

The three main approaches to weed management are:

- Prevention of establishment,
- Early detection and eradication, and
- Management of existing populations.

i. Prevention

This is the most effective means of control. Establishing workable prevention mechanisms is much more cost-effective than controlling established populations. Prevention mechanisms include:

- Cleaning machinery between jobs,
- Only using clean, weed-free fill materials, including stockpiles,
- Marking turn-around points for maintenance works to prevent longitudinal spread through mowing or grading,
- Revegetation of disturbed areas, and
- Minimising or avoiding disturbance in areas of native vegetation.

ii. Early Detection and Eradication

The second most cost-effective means of weed control is early detection and eradication. Eradication of newly established populations is possible only if detection mechanisms are in place to identify them.

iii. Management of Existing Populations

Managing existing weed infestations can involve eradication, control or containment depending upon the extent and severity of infestations, and the resources available to manage the program. Mulching, burning, cultivation, introduction of competition, grazing, biological control and chemicals are all management tools that can be used where appropriate.

iv. Grazing and Stock Movement

Grazing of domestic livestock is defined as vegetation clearance under the Native Vegetation Act, 1991. Movement of stock along road reserves can aid the spread of weeds, compact the soil, exacerbate soil erosion problems and hinder native plant regeneration. Whilst it is necessary to allow the moving of stock along road reserves to move them between paddocks, stock movement should be avoided where there is Declared Rare Flora or native vegetation that is classified in an Environmentally Sensitive Area (ESA). Landholders must find alternative routes for the movement of stock through negotiation with adjacent landholders.

v. Fencing

Item 11 of regulation 5 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 provides an exemption for clearing between private property and Crown land (e.g. a road reserve), provided that the clearing on the Crown land is no more than 1.5 metres from the fence and provided that the clearing, combined with other limited exempt clearing on the property, does not exceed 1 hectare in the financial year in which the clearing takes place. This exemption applies to the owner of the land on which the clearing is to take place, therefore the written approval of the owner of that Crown land (e.g. the Local Government in the case of a road reserve) must be obtained prior to undertaking the clearing. This exemption does not apply in environmentally sensitive areas.

vi. Removal of Plant Material

Dead timber on roadsides can provide valuable habitat for small mammals, reptiles and most importantly invertebrates. Allowing it to decompose through natural processes also maintains integrity of the nutrient cycling that underpins stable ecosystems. Removal of dead timber destroys these habitats and processes. Another aspect of the stability of roadside ecosystems is the maintenance of the ability to regenerate. Excessive removal of seed from native vegetation diminishes the amount of seed available in the soil for new plants to grow from. Ultimately, this can lead to lower densities of some species and alteration of the vegetation structure.

vii. Summer Weed control

Summer weed control is an imperative component of roadside weed control and must be undertaken when weed burdens are posing significant threat to the native roadside vegetation and surrounding agricultural land. Summer weed control involves accounting for the same policy measures as discussed for general weed control. Summer weed control also needs to account for the risk fire plays when weeds are left uncontrolled.

Before implementing a summer weed control program, it is important to consider the high persistency of summer weeds and difficulty in containing their spread. Species such as Caltrop (*Tribulus terrestris*), Afghan Thistle (*Solanum hoplopetalum*) and Prickly Saltwart (*Salsola Kali*) are examples of summer weeds with highly adapted systems that make them very difficult to control. In these cases control methods should take into consideration:

- Growth stages of the plant
- Seed development stages and timeframes
- Herbicide tolerance and susceptibility
- Areas of high population densities of the specific weed and potential distribution zones.

viii. Declared plants

Plants may be 'declared' by the Agriculture Protection Board under the Agriculture and Related Resources Protection Act 1976. If a plant is declared, Council employees are obliged to control that plant on roadside reserves where they are present. Declaration specifies a category, or categories, for each plant according to the control strategies or objectives which are considered to be appropriate in a particular place.

Among the factors considered in categorising declared plants are:

- The impact of the plant on individuals, agricultural production and the community in general,
- Whether it is already established in the area, and
- Feasibility and cost of possible control measures.

Collecting plant samples for identification

Identification of plants is important to establish a record of the distribution or to confirm if a plant new to the area is declared. Specimens collected can be sent to any office of the Department of Agriculture and Food where it can be identified or sent on to the State Herbarium if identification cannot be made. Preparing plant samples to ensure that the key identifying components are included is essential to assist in this process. A publication by the CRC for weed management gives a very comprehensive methodology for collecting and preserving plant collections. This document is available from their website: www.weedscrc.org.au.

5.2 General weed management for adjacent landholders

Roadside Reserve weed control management must be undertaken with close consultation with Shire Environmental Staff to ensure that adjacent landholders adhere to minimum disturbance guidelines when controlling weed populations in roadsides.

Adjacent landholders are encouraged to maintain effective weed management strategies along fence lines adjacent to a road reserve to suppress weed populations from entering the road reserve from their properties and from entering their properties from the road reserve.

In road reserves where native vegetation (trees, shrubs, grasses and other ground covers) may be impacted you should seek advice from the Department of Environment and Conservation Native Vegetation Conservation Branch ((08) 9219 8744) as a clearing permit may be required under Part V of the Environmental Protection Act 1986.

NOTE: This includes farmers spraying weeds in road reserves and in fact if a landholder inadvertently kills native vegetation they could be liable under the Environmental Protection Act 1986.

The following weed management practices can be implemented to ensure suppression of weed populations:

5.2.1 Herbicide spraying

Selective and Non- Selective herbicides may be used to manage weed infestations up to 1.5m from the existing fence line on the side of the road reserve.

The use of Selective and Non- Selective herbicides may be necessary to manage weed populations up to 5m away from the internal fence line of a landholder's property.

It is important that landholders obtain expert advice on suitable herbicides to use for different weeds present on road reserves and take into consideration the presence of waterways, livestock and native species present before undertaking herbicide applications.

5.2.2 Cultivation

Cultivation is an effective weed management strategy to use to control the 5m buffer area from the internal fence line of a landholder's property. This will also effectively establish fire break zones between the road reserve and a property.

5.2.3 Burning

Burning is an effective weed management strategy to use to again, control the 5m buffer area from the internal fence line of a landholder's property. This will also effectively establish fire break zones between the road reserve and a property.

5.3 Role of Council in Assisting Landholders with Roadside Weed Control strategies

5.3.1 Herbicide spraying

Permission must be obtained from Council prior to any herbicide applications sprayed on Goomalling Road Reserves.

A list of declared weeds and common weeds can be sourced from the Shire of Goomalling NRM Officer. The NRM Officer can also give assistance with suitable herbicides to use where native species are present to minimise any adverse effects on these species.

Careful consideration of weather conditions is imperative for herbicide applications to be successful. Rainfall events and wind speeds directly influence the success of a spraying program i.e. due to rain washing herbicide off plants and stopping uptake and wind causing herbicide drift.

Consultation with local agronomists and the Shire of Goomalling NRM Officer is important to determine suitable weed management strategies according to seasonal conditions.

5.3.2 Cultivation

Cultivation is an effective weed management strategy to use to control the 5m buffer area from the internal fence line of a landholder's property. This will also effectively establish fire break zones between the road reserve and a property. No Council approval is required for cultivation of fire breaks.

5.3.3 Burning

Permission must be obtained from Council prior to any burning program being conducted on any Shire of Goomalling road reserves.