

The management and threat of weeds – a VicRoads perspective.

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Overview

Weeds or beautiful plants in the landscape? Anyone driving past a field of brilliant purple of flowering Paterson's curse might struggle to declare that this plant is an undesirable pest. Without the bias of local attitude towards such plants, visitors to the region might praise the beauty of the 'wild flowers'.

Context has always been a necessary association when classifying weeds. A weed on what basis? Decreases to agricultural production and the potential damage to the local environment are two common perspectives used to identify plant species as weeds.

Similarly, perspectives on plants as weeds are an over-riding influence in decisions, priorities and organizational policies on weed management. Effective weed policy should therefore embrace the different perspectives that people have towards the management of weed responsibilities.

VicRoads is no exception. As an organization it has its own set of values, responsibilities and priorities that influence its efforts in weed management.

VicRoads Metro North West Region

The Metro North West (MNW) region of VicRoads is the smallest in area of the seven VicRoads regions state-wide, but one that contains very high numbers of different weed species. It is bound by the Yarra River to the east, stretches as far as Eltham to the north, Werribee to the south and the borders of Bacchus Marsh to the west.

It contains 16 local government municipalities, has two distinctive climate zones in regard to rainfall and contains over 220 kilometres of freeways and highways as well as a multitude of arterial and local roads. It also contains major components of Melbourne's transport network including the Western Ring Road, Western Highway, Calder and Tullamarine Freeways, the Princes Freeway, the Hume Highway and the new Craigieburn Bypass.

All of the roads it contains have roadsides and unfortunately all of these roadsides have weeds.

VicRoads perspective

The core business of VicRoads is to provide a safe and efficient road transport system. Safety of the road user is of paramount importance.

The management of roadsides is essentially by default i.e. roadsides represent the

'left over' sections of land that isn't actual road pavement. This land is multipurpose. It contains services such as power, water, drainage, and telecommunications that service the community and may also have its own unique set of environmental, cultural heritage and landscape values that also need to be responsibly managed.

As a manager of public land assets, VicRoads has a responsibility to manage the values of the roadside environment under various Acts including:

- *Environmental Protection and Biodiversity Conservation Act,*
- *Flora and Fauna Guarantee Act,*
- *CaLP Act,*
- *Heritage Act,*
- Noxious weed legislation,
- Victorian Pest Management – A Framework for Action (2002), etc.

VicRoads needs to balance these responsibilities and legislative requirements within the limits of operational budgets to maintain the existing road network and plan for expansion to service an increasing population.

A Weed overview of the Metro North West Region

VicRoads MNW region is known to have seven weeds declared of National Significance on its roadsides including:

- Chilean needle grass (*Nassella neesiana*)
- Blackberry (*Rubus fruticosus* agg.)
- Gorse (*Ulex europaeus*)
- Serrated tussock (*Nassella trichotoma*)
- Bridal creeper (*Asparagus asparagoides*)

The MNW region also has:

- Five declared 'Regionally Prohibited' noxious weeds that VicRoads is legally bound to eradicate under state law,
- Thirty-five declared 'Regionally Controlled' noxious weeds that VicRoads is legally bound to treat/manage under state law, and
- Over 160 different species of agricultural and environmental weeds on its roadsides in general.

The resources required to manage weed issues of this scale are large and are measured in annual expenditures of hundreds of thousands of dollars. However, even these sums of money are not enough deal with all weed issues. Priorities need to be established to appropriately deliver weed management.

The broad philosophy is: 'compliance first and then other weed issues if possible'.

Noxious weeds require management under state law, so that noxious weeds are treated before others without this legally recognized status.

This hierarchy imposed by legislation, can lead to some interesting situations as it relies upon legislation to be complete and up-to-date. But of course it isn't in all cases.

The Chilean needle grass situation

Chilean needle grass (CNG) is currently not registered as a noxious weed in Victoria. VicRoads is therefore not compelled to treat it and correspondingly sets it as a lower priority for management than other noxious weed species.

CNG is however one of the most (if not the most) vigorous and successful environmental weeds of the Region. It is present on nearly all major roadsides and has the infamous notoriety of being one of the limited list of *Weeds of National Significance* as declared by the Federal Government. It is arguably the greatest flora threat to endangered grasslands of the Western Plains and has proven extremely difficult to manage out of slashed areas of turf (found on most roadsides).

Currently, the area occupied by CNG on freeways and highways in the Region, more than doubles the area occupied by serrated tussock.

From a different perspective, CNG is a vigorous turf species that is hard wearing and stays 'green' for the majority of the year even in the harshest conditions of the dry western plains.

If it is not a weed, is it a turf grass option that answers the prayers of roadside managers?

At the moment it is a matter of perspective as to whether VicRoads should be spraying it or sowing it.

VicRoads weed management activities

VicRoads addresses the issues of weed management on a number of different levels. The majority of effort is spent on actual treatment of weed infestations and the prioritization of areas to treat. However, other activities that form part of VicRoads regional weed program include:

- Weed mapping,
- Improved weed treatment contracts – routine roadside maintenance vs. targeted,
- Regional weed treatment coordination efforts,
- Involvement in weed management research, e.g. RMIT slasher design and DPI weed initiatives, and
- Increasing the focus on weed management within Roadside Conservation Management Plans (RCMPs).

Incremental improvements are occurring but continuing effort is required.

Summary

The challenges for VicRoads weed management are many. Roads are inherently some of the most difficult areas in which to manage weeds. They are linear and experience constant weed seed input and dispersal through almost continuous vehicle movement. Other activities of routine landscape maintenance and in particular the mowing of turf, acts as a primary cause of weed spread.

Limitations of funding promotes compliance with legislation first so that weed species without noxious weed classification are not targeted for treatment with the priority they deserve from environmental perspectives. Even the monitoring of weed populations to evaluate the on-ground effects of weed treatment programs is complicated, costly and the data itself constantly changing.

The impact of current weed policy on VicRoads weed management is predominantly in identifying what sub-set of weeds are targeted for treatment and in what priority order. For this influence to have desirable on-ground outcomes, policy must be as complete and as up-to-date as possible. If not, policy can potentially have an on-ground effect of selectively favouring certain weed species by targeting other weed species that compete for the same areas and resources.

It may even be possible that the rapid spread of tenacious weeds such as Chilean needle grass, has been assisted by their omission from noxious weed listings.

Victorian local government and weed management: programs, resources and management approaches

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Introduction

The Municipal Association of Victoria (MAV) is the peak statutory body representing the 79 municipal councils of Victoria. In recent years the MAV has taken a keen interest in the role of Victorian local government in weed management. In mid-2001 the MAV hosted a forum titled 'How can local government help to improve weed management in Victoria?' The forum was a partnership between the MAV, the Victorian Farmers Federation (VFF), the Victorian Catchment Management Council (VCMC) and the then NRE. The forum explored the capacity of Victorian local government to take an active role in weed management. This was followed in 2002 by the development of a detailed report and presentation of case studies on the programs, resources and management approaches of Victorian local government for weed management.

This paper provides an overview of Victorian local government's current weed management activities and priorities, and identify issues affecting local government's capacity to undertake weed management. It describes a range of mechanisms and approaches being used by councils to progress weed management, and identifies the barriers limiting the ability of local government to move further forward in its weed management activities.

Local government powers and role for weed management

Local government has broad powers in relation to environmental management and, more specifically, weed management. There is also a role for local government as a statutory and strategic planner and priority setter, community educator and advocate, and as a facilitator for community weed management programs.

On the ground there has been some confusion over the exact role of local government in weed management. Councils have identified a need to clearly define the respective responsibilities of the Catchment Management Authorities (CMAs), the Department of Sustainability and Environment (DSE) and other state agencies, and local government to avoid duplication and inconsistent approaches in weed management. Likewise, with particular attention to weed management on roadsides, councils note confusion over roadside responsibilities, anomalies that exist in the

current legislation, and that compliance with legislation and planning provisions is difficult to enforce.

Weed management legislation that applies to local government

Municipal councils have a responsibility to control weeds on the land they own or manage. Acts that outline these responsibilities are:

- *Catchment and Land Protection Act* 1994.
- *Crown Land (Reserves) Act* 1978.
- *Land Act* 1958.
- *Flora and Fauna Guarantee Act* 1988.

Local government can create local laws regarding the control of weeds in their municipality under the *Local Government Act* 1989.

Local government can also exercise some degree of control over weed removal on a specific site or in a revegetation schedule under the *Planning and Environment Act* 1987.

The protection of biological diversity is set out by the Commonwealth Government *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act)

A Victorian snapshot

In mid 2002 the MAV surveyed all Victorian councils on a range of environment issues. Victorian councils presented a mixed response to weed management as a priority environment management issue, perhaps reflecting the confusion over the role and funding issues and barriers. The survey revealed that 46% of councils rated weed management as a high priority environmental issue and 45% considered it a major activity currently undertaken by council.

At that time across the state a fifth of councils had an existing weed management strategy. This figure increased when consideration was given to the inclusion of a weed control component in other natural resource management strategies of a council, such as vegetation protection, biodiversity conservation or roadside management plans, or an overarching environment strategy.

It is also important to note that in the absence of a defined weed management strategy; many councils still undertake weed management activities, often based on the strategies of the relevant CMA or DSE.