

## New initiatives for weed management on public land in Victoria

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### Summary

This paper provides an overview of a component of the Weeds and Pests on Public Land Initiative – the development of a decision-support and monitoring and evaluation framework for guiding decision-making by public land managers.

### Introduction

In 2002, the Victorian Government's policy for the management of weeds and pest animals on public land was encapsulated into a major new initiative, the Weeds and Pests on Public Land (Including National Parks) (WPPL) Initiative. The WPPL Initiative supports the Victorian Government's commitment to provide \$14m over four years for a major weed and pest control program on public land in Victoria. The WPPL Initiative complements the \$10m Tackling Weeds on Private Land Initiative.

The aims of the WPPL Initiative are to:

- Protect biodiversity assets on public land from threats caused by weeds and pest animals.
- Improve public land stewardship through a collaborative approach at the landscape level.
- Minimize the threat of weeds and pests spreading from public land to private land.
- Engage the community in the management of public lands.

The WPPL Initiative will enhance weed and pest management on the public land estate by delivering outcomes in four key areas:

1. Improved on-ground pest management across the public land estate: Parks, Forests and other Public Land
2. Decision support infrastructure
3. Monitoring and evaluation
4. Extension of the 'Good Neighbour' Program

### Improving public land stewardship through decision-support frameworks

The Weeds and Pests on Public Land Initiative (WPPL) is enabling improved decision-support and monitoring and evaluation frameworks to be developed for pest and weed management on public land in Victoria. Public land covers some 8.5 million hectares of Victoria subdivided among numerous tenures and having

considerable spatial diversity (small to extensive parcels, coastal to alpine). Around one million hectares of public land is leased to private landholders.

Victoria has a diverse indigenous terrestrial and aquatic biodiversity including some 3140 species of vascular plants, 900 lichens, 750 mosses and liverworts, 111 mammals, 447 birds, 46 freshwater fish, 133 reptiles, 33 amphibians, and an untold number of invertebrates, fungi and algae species. There are many unique ecosystems, represented by over 220 Ecological Vegetation Classes. Public land contains many of the State's most precious biodiversity assets.

The challenge is to protect Victoria's public land assets against both the significant potential for new introductions of pest plant and animal species whilst also maintaining the effort against those that have become established. To achieve this, public and private land managers must work together, across land tenures, to achieve an integrated outcome that maximizes environmental, social and economic benefits. Confronted with a diversity of pest plant and animal issues, careful planning and prioritization is required to ensure maximum benefit from public expenditure.

Strategic approaches have been developed for a number of species including foxes and rabbits (Long *et al.* 2003, Robley and Choquenot 2002, Robley and Wright 2003). A new WPPL project provides the opportunity to improve consistency and co-ordination between public land managers using environmental weeds as a 'platform' on which to base new approaches.

Environmental weeds pose one of the major threats to native biodiversity and this has been formally recognized with the listing of 'The invasion of native vegetation by environmental weeds' as a Potentially Threatening Process under the *Flora and Fauna Guarantee Act 1988*. Carr *et al.* (1992) present a list of 584 taxa (576 species) of environmental weeds in Victoria.

The 'Developing Adaptive Decision-making Frameworks for Management of Weeds and Pests on Public Land' project has identified a number of opportunities for improvement in public land stewardship including:

- *Refined priority-setting mechanisms for management of environmental weeds on public land*

The output will be 'Guidelines and Procedures for Environmental Weed Management on Public Land in Victoria' which will set out the legislation, principles and standards that apply to managing environmental weeds on public land.

- *Establishment of Adaptive Management approaches for environmental weed management*

This involves establishing a case study (The WPPL Otways project has been selected) and using this to develop the systems that are required to prioritize assets to be protected on the basis of significance and risk whilst also addressing prevention issues. The case study will be a practical application of the Guidelines and Procedures and will help develop many of the analytical tools required.

- *An analysis of statewide priorities to enable targeting of works at protection of priority assets*

The aim is to scale up the approaches used in the case study to develop an 'Analysis of statewide priorities for environmental weed management'.

- *Input to review of Weed Action Plans (WAPS)*

Weed Action Plans are the principal tools used under the Victorian Pest Management Framework (ref) to prioritize and co-ordinate weed actions within regional catchments. They offer the opportunity to improve co-ordination between weed managers across the landscape.

- *A consistent approach to monitoring and reporting standards, criteria and performance measures for weeds and pests across public land*

This will be achieved through developing monitoring, evaluation and reporting processes in connection with the Initiative and case study. Whilst development of species-based protocols is underway, the objective here will be to develop an analysis at a broader level to determine whether key objectives for ecosystem health and biodiversity are being achieved.

As a result of focusing on public land stewardship, the project continues to raise important questions for pest and weed management on public land. Should environmental weed management be based on a prevention plus asset protection approach or alternatives such as containment of spread? This project is working on the former assumption. With land managers required to prioritize all their natural resource management actions simultaneously, how can environmental, social and



**Figure 1. Major threat or just an eyesore? In order to assess the relative significance of this dense infestation of English broom (*Cytisus scoparius* ssp. *scoparius*) public land managers need a framework that considers its potential impact on assets they seek to protect. Vehicle (centre) is a Toyota Hilux 4WD. Photo: Kate McArthur.**

economic assets be compared in a rational rather than emotive framework (Figure 1)? If the objective is to maintain the highest value, best quality biodiversity assets, how can prevention of an impact (from environmental weeds) be adequately measured for reporting purposes when the desirable result is that the condition at least remains stable?

The current status of the project is that 'Interim Guidelines and Procedures for Environmental Weed Management on Public Land' have been drafted by a cross-business committee called the Environmental Weeds Working Group. These will be made available in their Interim form for wider input and critical analysis. Components involved in the case study have been specified and data collation, collection and evaluation will soon commence.

### Endnotes

An **environmental weed** is a non-indigenous plant species that has invaded (or has the potential to invade) natural ecosystems and threaten (or has the potential to threaten) environmental and/or conservation assets. It may include some Australian native plants not indigenous to a given area.

### References

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