Case study: Operationalising the NSW Weed Risk Management System – A Resource Prioritisation and Allocation Model

COUNCIL NAME
Port Stephens Council

WEB ADDRESS
portstephens.nsw.gov.au

SIZE
979 square kilometres

POPULATION
69,556

Overview

Port Stephens Council's Invasive Species Team have developed a weeds program prioritisation model, which ensures efforts are focused on managing the most significant weeds while maximising efficiency in targeting them. The model is based on the NSW Weed Risk Management System (NSW WRM) developed by the NSW Department of Primary Industries (DPI) to establish weed management objectives and determine legislative inclusions. The model also identifies required resources to achieve weed management outcomes and provides prioritised time allocation to control priority weeds according to Regional Strategic Weed Management Plans.

Background

With over 2700 naturalised plants in Australia, there are always going to be more weeds to manage then resources available. In response to this challenge, Council have developed a weeds program prioritisation model that ensures their efforts are focused on managing the most significant weeds. The model builds on the NSW WRM and allocates weighted scores to arrive at a responsible and feasible on-ground work program identifing the resources for weed management outcomes. It shows a prioritised list of weeds, considers resources and management goals, allocates expenditure, and limits management time before moving on to the next species, ensuring goals are met for the highest priority weeds.

Existing risk assessment and management systems provide a management goal or category such as eradicate, destroy infestations or contain spread. Deciding how to allocate funding to deal with problem weeds is an important challenge. The state funded Weed Action Program focuses on prevention and early intervention, so organisations are left to comply with Biosecurity legislation in minimising risk by controlling priority weeds on land in their care and control. With risk assessments completed regionally, the Port Stephens model can determine resource allocation based on those assessments, bridging the gap between the weed risk management category and the on-ground operational program, producing a Weed Risk Assessment Program Prioritisation System (WRAPPS).

Implementation

The outcome was to identify and assess weeds that pose a risk to the environment, agriculture, industry or people of the Port Stephens LGA by developing a weed control program that provides a level of certainty and a form of evidence that Council is effectively discharging the organisations' Biosecurity duty.

The model was developed to address organisational biosecurity risks and appropriately allocate resources, consulting with NSW DPI weed science and systems officers. The model was developed to create strategic weed and pest control programs. The budget equated to three weeks full time initially, with ongoing subsequent refinement of the system. An annual review of the WRM ensures up-to-date distribution and impact considerations for each weed, ensuring the annual allocations remain appropriate.

It takes the Control Feasibility score from the Weed Risk score produced by the standard NSW WRM to produce a rank. With the organisational or regional funding allocations, the model produces a prioritised list of weeds, which considers available resources and management goals, allocates expenditure and limits management time before moving on to the next species, ensuring goals are met for the highest priority weeds.

Outcomes

Through implementing WRAPPS, the Invasive Species Team identified and assessed 32 weeds posing a risk to the LGA. By implementing a control program for each of these species based on the level of risk and in consideration of available funds, Council can efficiently and effectively demonstrate compliance with the *Biosecurity Act 2015*. The model ensures appropriate allocation of resources to each weed species allowing Council to monitor and review annual control programs and adjust accordingly. In the long term, implementing the system ensures not only discharge of Biosecurity duty, but effective control of weed species that threaten the environment, agriculture, industry and the people of Port Stephens.

Key Learnings

The 2019/20 financial year will be the third year Council have used the WRAPPS model to develop and implement their weed control program. The WRAPPS is able to be used in relation to time or budget allocation, and can be used as a broader decision support tool for any work where prioritisation of time or funding is required.

WRAPPS works well in parallel to the Weed Action Program and can be implemented at various levels to identify budget required to achieve weed management goals. When applied in NSW to WRMs undertaken by Regional Weeds Committees, WRAPPS can provide a prioritised allocation of time required to control priority weeds according to the Regional Strategic Weed Management Plan, essentially operationalising Weed Risk Management. This facilitates factual and clear budget communication, which is very uesul when communicating with and seeking budget allocations from council, an aspect of the model that should not be underestimated.

Contact

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This project was the 2019 winner of the Invasive Species Management Award at the LGNSW Excellence in the Environment Awards