NSW Department of Primary Industries
Office of Environment & Heritage

Understanding weed management
in New South Wales

All weed management in New South Wales (NSW) can be classified under four approaches: **Prevention**, **Eradication**, **Containment** and **Asset protection**. These four approaches can be thought of as matching the invasion process of a weed species from arrival through to widespread establishment (see Figure 1).

The approach taken can be in response to a specific or local situation, or used to describe broader weed management at a regional, state or national scale. Different weed management strategies and legislation can be applied to each of the four approaches depending on the specific situation.

What is our highest weed management priority?

Three methods are used to determine weed management priorities in NSW:

- The *Weed Risk Assessment* (WRA) system for quarantine or pre-border management addressing the **Prevention** category (see Figure 1). or

- The *Weed Risk Management* (WRM) system for post-border assessment and prioritisation of weed species once they have arrived and established, addressing **Eradication** and **Containment** (see Figure 1). or

- The Biodiversity Priorities for Widespread Weeds (BPWW) system for prioritisation of sites for environmental **Asset protection** (see Figure 1). This process is modelled on the Bitou Bush Threat Abatement Plan and ensures impact reduction is the primary focus for control of widespread weeds. A system for prioritising non-environmental assets impacted by widespread weeds is yet to be established.

Weed management strategies and legislation in NSW

There are a variety of weed management strategies, programs and legislation in NSW that can be used in one or more of the four management approaches. For example, quarantine is specific to **Prevention** while the *NSW Invasive Species Plan* (NSW ISP) is relevant for all four approaches. Broader strategies, programs and legislation can be applied to multiple approaches and often rely on, or build upon other strategies that are specific to one approach. For example for **Asset Protection**, NSW DPI and OEH worked with the 13 Catchment Management Authorities (CMAs) to identify and prioritise sites where widespread weeds threaten environmental assets. The outcomes of this project will contribute to the NSW ISP, CMA weed strategies, NRM Monitoring, Evaluation and Reporting (MER) Strategy as well as actions under the NSW *Threatened Species Conservation Act 1995*.

Reporting and monitoring

Monitoring, Evaluation and Reporting must be an integral component of any weed management program. A state-wide MER strategy for invasive species is being developed, based around the four approaches, using three indicators: (i) new incursions; (ii) emerging species; and (iii) asset protection through reducing impacts at priority sites. All weed management stakeholders in NSW should include MER actions within their programs.

for further information visit
www.dpi.nsw.gov.au/weeds or
www.environment.nsw.gov.au/pestsweeds

Weed management

Species absent

Small number of localised populations

Rapid increase in distribution and abundance, many populations

Invasive species widespread and abundant throughout its potential range

Asset protection

Containment

Eradication

Prevention
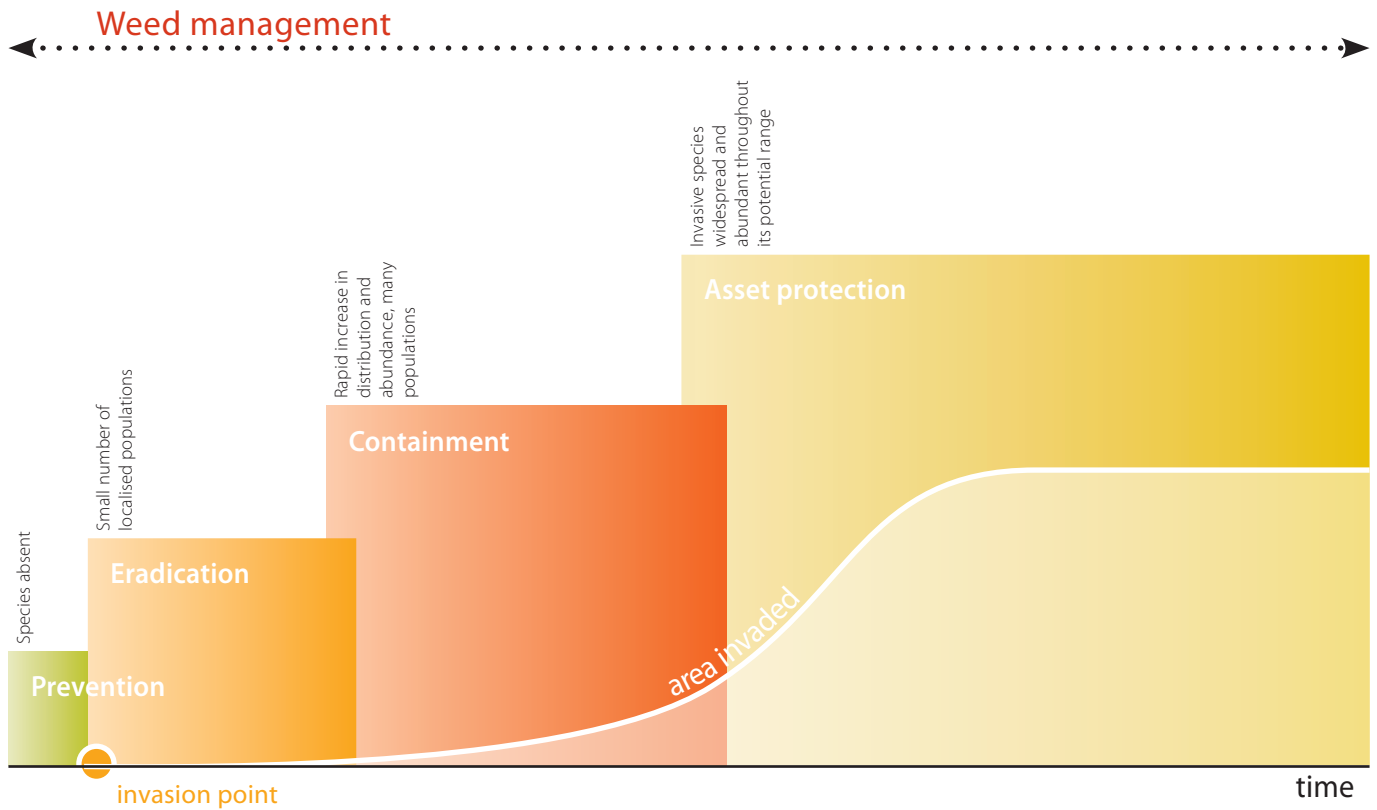
area invaded

invasion point

time

Figure 1. Weed management programs in NSW (after DSE 2007).

All weed management programs can be broken into four approaches, each of which has specific strategies, policies and legislation

Prevention – weed management aimed at preventing new weed species from arriving.

Examples of relevant strategies or legislation:
- Australian *Quarantine Act 1908*
- NSW New Weed Incursion Plan
- National Prohibited and Permitted Lists
- Australian National Eradication programs
- Australian National Environmental Alert List
- Australian Agricultural Sleeper Weed List

Eradication – weed management aimed at removing newly arrived and naturalised weeds (including all plant material), where eradication is an achievable goal.

Examples of relevant strategies or legislation:
- NSW Incursion Plan for Invasive Plant Species
- Australian National Eradication Programs
- Australian National Environmental Alert List
- Australian Agricultural Sleeper Weed List

Containment – weed management aimed at reducing the spread and/or severity of established weed infestations using defined geographic boundaries. Eradication is no longer feasible.

Examples of relevant strategies or legislation:
- Weeds of National Significance containment lines (e.g. Lantana in Southern NSW)

Asset protection – weed management aimed at protecting assets from the impacts of established weed species. Assets may be environmental, primary production or community (human health or cultural). Control in areas with no defined assets are a low priority.

Examples of relevant strategies or legislation:
- NSW *Threatened Species Conservation Act 1995*
- NSW *National Parks and Wildlife Act 1974*
- NSW *Native Vegetation Act 2003*
- Australian *Environmental Protection and Biodiversity Conservation Act 1999*
- NSW Threat Abatement Plans/Priority Action Statement (PAS)
- NSW Biodiversity Strategy
- Biodiversity Priorities for Widespread Weeds in NSW

All four approaches

Examples of relevant strategies or legislation:
- NSW *Noxious Weeds Act 1993*
- NSW *Fisheries Management Act 1994*
- NSW Invasive Species Plan
- NSW Natural Resources Management (MER) Strategy
- NSW Catchment Weed Management Strategies
- NSW State and Regional Weed Management Plans
- NSW Regional Pest Strategies
- NSW National Parks and Wildlife Service Regional Pest Management Strategies
- Australian Weeds Strategy
- Weeds of National Significance Strategies
- AusBioSec – Australian Biosecurity System for Primary Production and the Environment