

WEEDS OF NATIONAL SIGNIFICANCE

Serrated tussock

**(*Nassella trichotoma* (Nees) Hack. ex
Arechav.)**

strategic plan 2012–17

This publication is produced as part of the Weeds of National Significance initiative, a joint initiative between the Commonwealth of Australia and each of the Australian states and territories.

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An unpublished draft of the revised strategic plan has guided national coordination of this Weed of National Significance for the past two years. Before publishing the revised plan, the Australian Weeds Committee altered it because some actions had been completed, and then agreed to include a uniform monitoring, evaluation, reporting and improvement (MERI) template for all phase-3 Weeds of National Significance.

Supporting information about the Australian Weeds Strategy, Weeds of National Significance and progress to date may be found at www.weeds.org.au, where links and downloads provide contact details for all species and copies of the strategy. Comments and constructive criticism are welcomed as an aid to improving the process and future revisions of this strategy.

This publication (and any material sourced from it) should be attributed as:

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Inquiries should be addressed to:

Secretariat
Australian Weeds Committee
GPO Box 858
CANBERRA ACT 2601

Email: awc@daff.gov.au

Web: www.weeds.org.au

Copies of this publication are available from the Secretariat or at www.weeds.org.au/wons.

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Summary

Serrated tussock is a Weed of National Significance (WoNS) that threatens productive pastures and native grasslands throughout south-eastern temperate Australia. It is a highly invasive weed and was selected as a WoNS due to its invasiveness, potential for spread and its social, economic and environmental impacts. Serrated tussock is similar in appearance to many native grasses and will readily invade pastures, native grasslands, grassy woodlands, and roadside and urban areas. Being a weed that is mostly dispersed by wind, it can easily spread between paddocks and within a region. It is a weed that can cause many complex issues within communities where it occurs, requiring a long-term commitment to management and a committed community and regional approach to control, supported by all levels of government.

A WoNS strategic plan for serrated tussock was developed in 2000 to create a framework to better coordinate management of serrated tussock across Australia. Since 2005–06 the National Serrated Tussock Management Group has monitored and reviewed annual progress towards each of the themes in the 2000 strategic plan. An independent review of all WoNS strategic plans was undertaken in 2009.

This revised strategic plan is an update to the earlier strategic plan and continues the national program for a further five years (2012–17). The new plan takes into account the significant progress to date, the findings of the independent review process and the input of a range of stakeholders. The original strategic action tables have been significantly revised to take these issues into account and they form the major substance of this revision.

This revised strategic plan for serrated tussock provides guidance to all stakeholders involved in its management. Managing the extensive distribution and the nature of serrated tussock requires the engagement and commitment of community, industry and government stakeholders at the local, regional, state, territory and Commonwealth levels. Without this cooperation and commitment the goals and objectives identified in this strategy will not be realised.

A draft version of this document was placed on public display in February 2011. All submissions received were considered and the draft plan was revised to address and incorporate issues raised during the consultation process. This revised strategic plan was submitted to the Australian Weeds Committee for endorsement in 2011.

A summary of the goals of the revised Serrated Tussock Strategic Plan is provided below. Further details about these goals are provided in the strategic action tables in Section 2. A monitoring, evaluation, reporting and improvement framework for this revised plan is provided in Section 3.

This strategy aims to deliver the following three key national goals and objectives:

- 1 Early detection capabilities are in place for serrated tussock and outlying infestations are actively managed.
 - Develop and maintain early detection mechanisms to protect and maintain ‘clean’ areas, with regular monitoring and reporting.
 - Promote best-practice approaches and materials in serrated tussock ‘clean’ areas and active management of outlying infestations.

- All outlying infestations are under active management (with a management plan), including monitoring and reporting mechanisms.
 - Record and map outlying populations to national standards.
- 2 Existing infestations are under strategic management.
- All existing infestations have management plans.
 - Actively promote and facilitate integrated land management, to contain and manage serrated tussock.
 - Support research opportunities for integrated weed management for serrated tussock control.
 - Strategically manage priority biodiversity assets (native grasslands).
 - Encourage and assist ongoing mapping of existing infestations to national standards.
- 3 Capability and willingness to manage serrated tussock is increased.
- Promote best-practice information materials and weed education.
 - Refine and adopt best-practice management techniques and approaches.
 - Support communities to coordinate and manage serrated tussock.
 - National collation of spatial data.
 - Coordinate and monitor implementation of the national serrated tussock strategic plan.

Vision

Prevent serrated tussock from establishing further in Australia and reduce its impact

1 Background

The biology, ecology, history of spread, impacts and control methods for serrated tussock are extensively detailed in the '*Serrated tussock—national best practice manual*' (Osmond et al. 2008, and available from the website www.weeds.org.au/WoNS/serratedtussock).

Serrated tussock is one of the worst perennial grass weeds in Australia, invading pastures, native grasslands and urban areas, and covering more than a million hectares in New South Wales, Victoria, Tasmania and the ACT. Serrated tussock, left unmanaged, has the capacity to greatly reduce productivity of grazing lands, impact on biodiversity values and, in inaccessible and difficult to manage areas, can be a continuous source of seed for whole regions and communities.

In our uncertain climatic times, serrated tussock is a plant that has great capacity to survive and further expand its spread (as can be seen in Figure 2, which shows its potential distribution using climatic analysis). It is a perennial grass that can tolerate extremes of temperature, low rainfall and low soil fertility. With its prolific seed production and ability to spread by wind, livestock, machinery and transport networks, it is well suited to rapidly advance over new areas, colonising bare patches of ground and changing landscapes.

Effective long-term management of serrated tussock exemplifies some of the key challenges of our time. How can the community, individuals and governments work together to better manage our land while maintaining livelihoods and the things we value and want to pass onto future generations? There are no easy answers to these questions.

This strategic plan seeks to inform and motivate all levels of government, land management agencies, communities and industry to limit future spread of serrated tussock and to work together to reduce the impacts of existing infestations. It provides an ongoing strategic framework to tackle the many challenges in managing serrated tussock.

The current distribution of serrated tussock is provided in Figure 1. The potential distribution of serrated tussock, based on climate analysis only, is shown in Figure 2, indicating that it could potentially spread further in New South Wales, Victoria and Tasmania and enter into the currently 'clean' states of Queensland, South Australia and Western Australia.

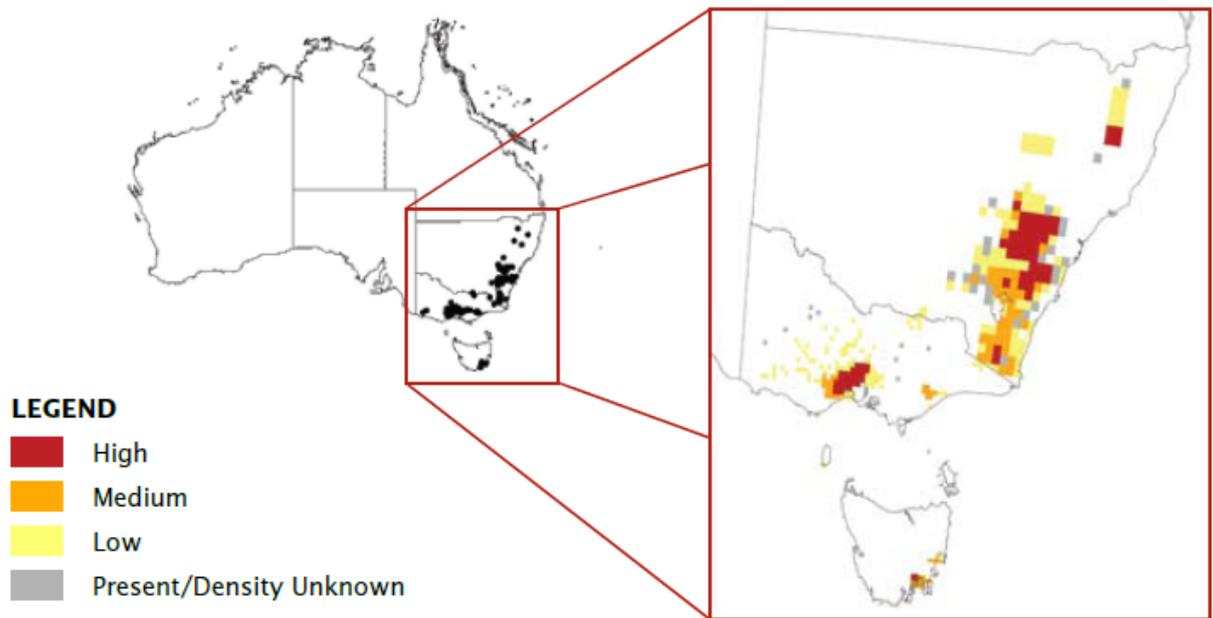


Figure 1: Current distribution of serrated tussock in Australia.

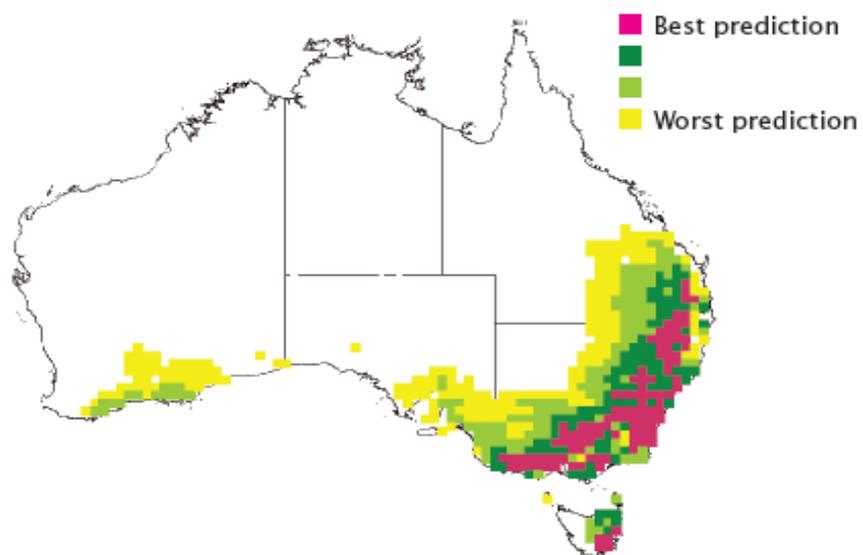


Figure 2: Potential distribution of serrated tussock in Australia using the CLIMATE® modelling system.

1.1 Principles underpinning the plan

This strategic plan is based on the seven key principles of the Australian Weeds Strategy (NRMMC 2007):

- Weed management is an essential and integral part of the sustainable management of natural resources for the benefit of the economy, the environment, human health and amenity.
- Combating weed problems is a shared responsibility that requires all parties to have a clear understanding of their roles.
- Good science underpins the effective development, monitoring and review of weed management strategies.
- Prioritisation of and investment in weed management must be informed by a risk management approach.
- Prevention and early intervention are the most cost-effective techniques for managing weeds.
- Weed management requires coordination among all levels of government in partnership with industry, land and water managers, and the community, regardless of tenure.
- Building capacity across government, industry, land and water managers, and the community is fundamental to effective weed management.

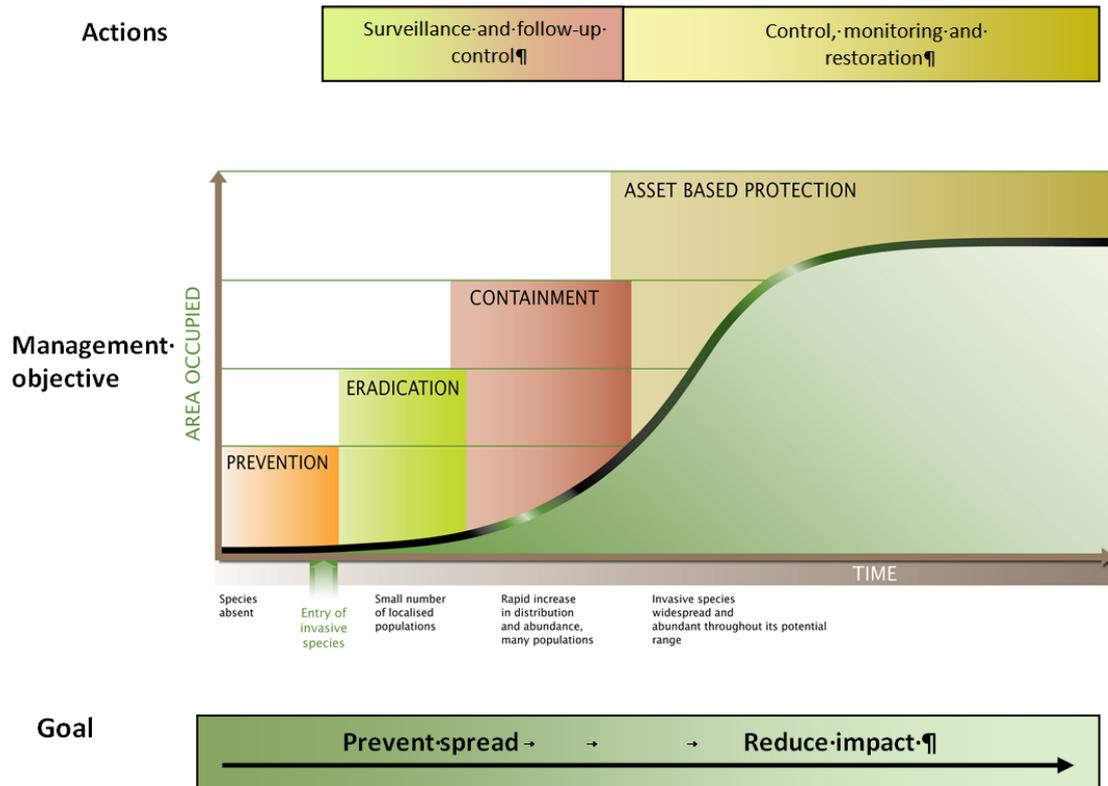
The WoNS initiative establishes national priorities and facilitates action where there is a significant national or cross-jurisdictional benefit to be gained. These strategic plans do not specifically address resourcing; however, they aim to identify efficiencies and ensure existing resources can be allocated to achieve the most strategic management outcomes.

Effective broadscale management of WoNS and other weeds requires an integrated approach that includes prevention and eradication programs, establishment and implementation of management zones, and the protection of key environmental, social and economic assets in areas where the weeds are already widespread (Figure 3).

While serrated tussock is widespread from a national perspective, management is undertaken at all scales, from national to local, with each scale managed with appropriate objectives and actions. As a national strategic plan, this plan focuses on national priorities and actions, assuming that state and local governments will continue their important roles and responsibilities in weed management.

The strategic actions in this plan were developed taking into account the general principles of weed invasion and management response represented in Figure 3. Strategic weed management can be broadly categorised into: prevention, eradication, containment and asset-based protection. These principles have been embodied in this revised national plan under the objectives outlined below, which also form the basis for grouping the strategic action tables (Tables 1–3):

- New infestations are prevented from establishing (prevention).
- Outlying infestations are actively managed (goal of eradication).
- Existing infestations are under strategic management (containment and asset protection).



Source: Modified from Hobbs & Humphries (1995) and DPI (2010).

Figure 3 Stages of weed invasion with corresponding goals, management objectives and actions at each stage

1.2 Development of this strategic plan

Since 2005, the National Serrated Tussock Management Group (NSTMG) has monitored and reviewed annual progress towards each of the actions in the national strategic plan. An independent review in September 2009 recommended revision of the existing strategic plan. As a consequence, the NSTMG, in conjunction with stakeholders, has developed this revised 2012–17 strategic plan for serrated tussock. A draft version of the strategic plan was available for public comment for at least 30 days in February 2011. All submissions received were considered and incorporated, where possible, into a revised draft of the strategic plan, which was submitted to the Australian Weeds Committee for endorsement in 2011, resulting in this final version of the document.

Appendix 2, which shows the weed spread and management actions, is also based on these weed management principles and identifies: clean areas (prevention of spread), outlying populations (goal of eradication), containment lines and core infestations (active strategic management and asset protection). This map identifies areas which from a national perspective are priority for strategic activities.

Within this national framework the key principles embodied in this strategy are:

- To build partnerships based on cooperation and collaboration.
- To support and encourage community led action.
- Promote integrated weed management at a local, regional, landscape and national level.
- Encourage sustainable landscape management.

2 Strategic goals

Revised actions to prevent serrated tussock from establishing further in Australia and reduce its impact are described in Sections 2.1–2.3.

2.1 Goal 1: Early detection capabilities are in place for serrated tussock and outlying infestations are actively managed

The objectives and strategic actions to achieve goal 1 of the strategic plan, and the action level and responsible partners for each action, are shown in Table 1.

Table 1 Objectives and strategic actions to achieve goal 1 of the Serrated Tussock Strategic Plan 2012–17

Objectives	Strategic actions	Action level ^a	Responsibility
1.1 Develop and maintain early detection mechanisms to protect and maintain 'clean' areas, with regular monitoring	Engage and maintain partnerships with key stakeholders to support early detection and surveillance programs in 'clean' areas (Qld, SA and WA states, and clean regions within NSW, Vic, ACT and Tasmania)	1	NSTMG oversight, state and territory agencies (with responsibility for early detection), regional NRM bodies, local government, industry
	Identify national pathways of spread (e.g. interstate rail, fodder movement, nomadic travellers). Identify and engage with key stakeholders and promote best-practice materials (early detection and hygiene measures)	2 Annual	NSTMG oversight, state and territory agencies (with responsibility for early detection), regional NRM bodies, local government, industry
1.2 Promote best-practice approaches and materials in serrated tussock 'clean' areas and active management of outlying infestations	Develop, update and distribute suitable information products to fill best-practice information gaps and needs	2	State and territory agencies, regional NRM bodies, local government, weed managers, with NSTMG oversight
	Seek feedback on existing identification materials to help identify gaps and information needs	2	
	Identify core principles of IWM and sustainable landscape management for outlying populations	3	
	Influence development of information products to include information on best-practice management (including IWM and landscape-scale management) of serrated tussock, where feasible	3	
	Promote best-practice management of outlying populations to partners and stakeholders	1	
1.3 All outlying infestations are under active management (with a management plan),	Support active management and eradication programs for outlying serrated tussock populations ^b	2	NSTMG monitoring, state and territory agencies, regional NRM bodies, local government,

Objectives	Strategic actions	Action level ^a	Responsibility
including monitoring and reporting mechanisms			community groups
	Report annually on status of outlying populations	3	AWC
1.4 Record and map outlying populations to national standards	Support and liaise with agencies responsible for mapping outlying populations.	1	State and territory agencies, regional bodies, local government
	Encourage and assist agencies to map at national standards and promote value of consistent mapping across jurisdictions	1 Annual	
	Collate and analyse maps, where available. Request updated mapping data	2 As required	

ACT = Australian Capital Territory; AWC = Australian Weeds Committee; IWM = integrated weed management; NRM = natural resource management; NSTMG = National Serrated Tussock Management Group; NSW = New South Wales; Qld = Queensland; SA = South Australia; Vic = Victoria; WA = Western Australia

a The Australian Weeds Committee (AWC) applied three action levels that reflect jurisdictional commitment to implementing actions:

Level 1 = Highly beneficial as a national action that is critical to success of the WoNS revised strategic plan and all relevant AWC jurisdictions have committed resources to implementing this action.

OR

Highly beneficial to a particular jurisdiction and the responsible party/ies have committed resources to implement this action.

Level 2 = Highly beneficial at national and/or jurisdictional level, but implementation will be subject to resource availability and investment priorities.

Level 3 = Desirable and still beneficial to improving uptake and efficiency of on-ground action, but not critical to success.

b Outlying populations are identified in Figure 4, and include populations in Tasmania, Victoria and NSW (Riverina, New England)

2.2 Goal 2: Existing infestations are under strategic management

Serrated tussock has become well established across much of its range in eastern Australia. In these core areas, eradication is no longer considered a realistic objective, and the emphasis has shifted to reducing the impact of existing infestations, preventing further spread and protecting key environmental and agricultural assets.

The objectives and strategic actions to achieve goal 2 of the strategic plan, and the action level and responsible partners for each action, are shown in Table 2.

Table 2 Objectives and strategic actions under goal 2 of the Serrated Tussock Strategic Plan 2012–17

Objectives	National actions and tasks	Action level ^a	Responsibility
2.1 All existing infestations have management plans	Identify current status of management plans for existing serrated tussock populations (across all tenures)	2	State agencies, regional bodies, local government
	Promote strategic and active management of serrated tussock, including IWM and broader sustainable practices, at an appropriate level for management plans	1	
	Support coordination and alignment of management plans across jurisdictions and between levels of government	2	
2.2 Actively promote and facilitate integrated land management to contain and manage serrated tussock	Promote core principles of IWM and sustainable landscape management for existing serrated tussock populations	1	NSTMG monitoring, state agencies, regional bodies, local government. Community groups
	Build and support partnerships with other partners in integrated land management and sustainable grazing management programs with initiatives such as CMA/NRM catchment projects, Evergraze, Prograze, Sustainable Grazing Systems and Future Farming Industries Cooperative Research Centre	2	
2.3 Strategically manage priority biodiversity assets (native grasslands)	Identify and prioritise high-conservation native grasslands (at regional, state and national level) at risk from serrated tussock	3	Australian Government, state and territory agencies, regional NRM bodies, local government, community groups
	Identify core principles of best practice management for native grasslands		
	Develop and promote best practice management (including IWM and sustainable landscape management) for native grasslands		
	Identify and build partnerships with NRM managers and support development and adoption of management plans for		

Objectives	National actions and tasks	Action level ^a	Responsibility
	identified biodiversity assets		
2.4 Encourage and assist ongoing mapping of existing infestations to national standards	Encourage and assist agencies to map to national standards and promote value of consistent base-line mapping across jurisdictions	3	State and territory agencies, regional NRM bodies, local government
	Support collection and collation of serrated tussock data to national data standards	1 Annual	

CMA = catchment management authority; IWM = integrated weed management; NRM = natural resource management; NSTMG = National Serrated Tussock Management Group

a The Australian Weeds Committee (AWC) applied three action levels that reflect jurisdictional commitment to implementing actions:

Level 1 = Highly beneficial as a national action that is critical to success of the WoNS revised strategic plan and all relevant AWC jurisdictions have committed resources to implementing this action.

OR

Highly beneficial to a particular jurisdiction and the responsible party/ies have committed resources to implement this action.

Level 2 = Highly beneficial at national and/or jurisdictional level, but implementation will be subject to resource availability and investment priorities.

Level 3 = Desirable and still beneficial to improving uptake and efficiency of on-ground action, but not critical to success.

2.3 Goal 3: Capability and willingness to manage serrated tussock is increased

Successful management of both outlier and core infestation of serrated tussock is dependent on weed and land managers having the necessary skills and knowledge to identify and control it, as well as a long-term commitment to its management. Supporting community and regionally based groups to work together and coordinate on-ground activities critical to achieving long-term commitment and successful management of serrated tussock.

The objectives and strategic actions to achieve goal 3 of the strategic plan, and the action level and responsible partners for each action, are shown in Table 3.

Table 3 Objectives and strategic actions under goal 3 of the Serrated Tussock Strategic Plan 2012–17

Objectives	Strategic actions	Action level ^a	Responsibility
3.1 Promote best-practice information materials and weed education	Promote information materials in standard forums (e.g. WoNS web, program, distribution networks)	1	WoNS coordinators WoNS initiative, state coordinators, state government,
	Identify opportunities to promote best-practice management of serrated tussock and broader landscape management, in education forums (schools, TAFE, universities, extension forums, adult education)	3	NRM/CMA, local government, community groups

Objectives	Strategic actions	Action level ^a	Responsibility
3.2 Refine and adopt best-practice management techniques and approaches	Identify opportunities to promote research into IWM for serrated tussock and grassy weeds (this includes non-flupropanate control techniques to limit and manage herbicide resistance) Investigate options to develop on-farm trials and collate observations Promote public participation in observing serrated tussock and reporting unusual phenomena	3	NSTMG oversight, state and territory agencies, NRM regional bodies, local government, community groups
3.3 Support communities to coordinate and manage serrated tussock	Support and facilitate state or regional serrated tussock working parties and community projects Assist land managers, including community groups and individuals in developing weed management projects	3	NSTMG, working party members, state government, NRM/CMA, local government, community
3.4 National collation of spatial data	Collate updated serrated tussock data and produce revised national coverage maps Analyse national maps to inform national priorities	1	State government, local government
3.5 Coordinate and monitor implementation of the national serrated tussock strategic plan	Monitor progress against the national strategic plan Coordinate reporting with other WoNS species	1 3	AWC, state agencies NSTMG oversight

AWC = Australian Weeds Committee; CMA = catchment management authorities; IWM = integrated weed management; NRM = natural resource management; NSTMG = National Serrated Tussock Management Group; WoNS = Weed of National Significance

- a The Australian Weeds Committee (AWC) applied three action levels that reflect jurisdictional commitment to implementing actions:
Level 1 = Highly beneficial as a national action that is critical to success of the WoNS revised strategic plan and all relevant AWC jurisdictions have committed resources to implementing this action.
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Highly beneficial to a particular jurisdiction and the responsible party/ies have committed resources to implement this action.
Level 2 = Highly beneficial at national and/or jurisdictional level, but implementation will be subject to resource availability and investment priorities.
Level 3 = Desirable and still beneficial to improving uptake and efficiency of on-ground action, but not critical to success.

3 Monitoring, evaluation, reporting and improvement framework

The Australian Weeds Strategy (NRMMC 2007) gives the Australian Weeds Committee (AWC) responsibility for monitoring and evaluating the management of national priority weeds, including WoNS. The AWC is therefore responsible for monitoring and reporting on progress under this strategic plan.

This strategic plan is subject to a five-year review; however, mechanisms must also be put in place to allow the goals and actions to be evaluated throughout this period. This enables ongoing assessment of progress towards intermediate and long-term outcomes, and, ultimately, helps to determine the effectiveness of individual actions. It also helps to identify program improvements, and provides evidence to stakeholders and funding bodies that they are getting value from their investment.

Individual jurisdictions and/or organisations responsible for weed management and conservation will need to develop their own monitoring strategies. They should, where possible, coordinate actions to implement this plan, and monitor and evaluate progress towards its goals in conjunction with existing state, regional or local plans. While individual actions should be monitored at the jurisdictional level, data or evidence collected as a part of state, regional and local activities or plans should be provided to the AWC and collated so that it can be assessed each year within the national context. This will help to build a comprehensive overview of the plan's delivery. Table 4 lists key evaluation questions that should be assessed by the AWC each year at the national level to ensure progress against strategy goals, and which should be used to provide the basis for an annual report to the AWC.

This monitoring, evaluation, reporting and improvement (MERI) framework lists the basic reporting information that should be collected for the life of the strategic plan—including during phase 3 delivery (see Appendix 1). This will ensure that sufficient data are collected to identify successes and failures, and provide the opportunity for improvement where outcomes are not being achieved. Annual MERI plans may be developed to follow activities in more detail.

Although performance indicators or other ways of measuring progress are not provided in this strategic plan, a scoring system could be appropriate.

A generic program logic model (Appendix 3) was developed by WoNS coordinators in 2010. This shows the relationship between strategic actions and the objectives and goals they achieve. The program logic is one way to communicate the links between activities, their intermediate and long-term outcomes, and the vision of the strategic plan.

Table 4 Suggested monitoring and evaluation questions to measure progress under the phase 3 WoNS Serrated Tussock Strategic Plan 2012–17

WoNS:		Jurisdiction:	Date:
Goal	Key evaluation questions	Data or evidence required	Consider
1 Prevent new infestations from establishing	To what extent have new infestations been prevented from establishing?	1.1 National distribution data: Has the national distribution map been reviewed and/or updated? Has the Priority Management Action spreadsheet been updated?	<ul style="list-style-type: none"> • Are these documents publicly available? • Have stakeholders been advised of any changes? • Where is this data or information stored? • Does this information capture national priorities?
		1.2 New infestations: Number of new infestations recorded Percentage of known infestations actively controlled	<ul style="list-style-type: none"> • Are any new infestations occurring in areas identified as a high priority in the national strategy? • How were infestations detected (passive or active surveillance, community reporting etc.)? • Have high-risk pathways been adequately identified? • Have threats been minimised?
		1.3 Eradication and containment programs: Percentage of eradication and/or containment programs being maintained	<ul style="list-style-type: none"> • What percentage of programs identified in the national strategy are being actively managed? • Is there a plan in place for ongoing management? • How is progress being monitored and reported to stakeholders? <p>(Examples using case studies can be included)</p>
		1.4 Legislation: Legislation or policy changes for this species Legislative change has been identified by stakeholders	<ul style="list-style-type: none"> • What legislative changes have been made? • Are minimum requirements being maintained (e.g. ban on sale, trade, movement)? • Is control required throughout or in part of the jurisdiction? • Is compliance actively enforced?
			Score:

Table 4 *continued*

WoNS:		Jurisdiction:		Date:
Goal	Key evaluation questions	Data or evidence required	Consider	
2	Strategically manage existing infestations	2.1 Integrated weed management: Effectiveness of integrated weed management programs	<ul style="list-style-type: none"> Are existing tools providing adequate control of WoNS? Have new advances or technologies been developed and are they incorporated into best-practice management information? Are there barriers to adoption of best-practice management? Are research programs addressing any observed gaps (e.g. herbicide trials, biocontrol, restoration requirements post-control)? 	
		To what extent are assets being protected through strategic management?	2.2 Asset protection: Number of priority assets identified as 'at risk' from WoNS Percentage of priority assets being protected (e.g. assessed against relevant threat abatement plans) Percentage of state and regional invasive species plans that identify priority assets at risk from WoNS	<ul style="list-style-type: none"> Methods by which assets are being protected (e.g. targeted annual spray programs, high-risk pathway surveillance, strategic plans) Are long-term monitoring programs in place to detect change? To what extent is management leading to an improvement in asset condition? (Response should include status report on progress towards asset-protection programs)
			Score:	
3	Increase capability and commitment to manage WoNS	3.1 Community engagement and awareness: What is the status of best-practice information? Are partnerships being maintained to ensure collaboration on WoNS? Number and type of media activities	<ul style="list-style-type: none"> Is best-practice information up to date and readily available? Is this information and/or advice being targeted to priority regions? Is training being delivered to meet the needs of weed managers (including the community)? Are networks and groups being supported (e.g. through dissemination of research outcomes, 	

Table 4 *continued*

WoNS:	Jurisdiction:	Date:	
Goal	Key evaluation questions	Data or evidence required	Consider
			funding opportunities, control options etc.)? <ul style="list-style-type: none"> • Has awareness and engagement in WoNS management been raised effectively?
		3.2 Resourcing: From what sources are programs being funded?	<ul style="list-style-type: none"> • Number of projects funded by Australian Government, jurisdictions, industry, etc.
		3.3 Policy and planning: Are the objectives of the strategy being integrated into Australian Government/state/regional plans, policies and programs? Has cross-border collaboration occurred?	<ul style="list-style-type: none"> • How are priorities reflected in planning and policy approaches (e.g. weed risk assessments, invasive species plans, asset-protection plans, district plans, weed spread prevention activities, management programs, incentive programs, state working groups)? • How are national priorities being maintained (e.g. containment lines, eradication targets, training and awareness raising, research projects)?
			Score:
Continuous improvement	Are there any unexpected outcomes that have been identified through implementation of strategy?	Barriers: <ul style="list-style-type: none"> • Have any other management issues or impediments been identified? 	

WoNS = Weeds of National Significance

Scoring:

1: Insufficient evidence to score

2: No progress has been made against this goal

3: Limited progress is being made against this goal

4: Reasonable progress is being made against this goal

5: Excellent progress is being made against this goal

4 Stakeholder responsibilities

Although landowners have primary responsibility for the control of serrated tussock on their land, relevant agencies share responsibility for the actions listed in Sections 3 and 4. The effective implementation of this strategy requires the involvement of a range of stakeholders. Stakeholders' responsibilities may vary between jurisdictions: some actions may be optional while others are prescribed by legislation. The successful achievement of strategic actions relies on the development and maintenance of partnerships between community, industry and government, and recognition of the roles of each stakeholder. In particular, while the NSTMG provided oversight for the original strategy, future coordination arrangements will evolve to maintain and build on past achievements. The Australian Weeds Committee, at a national level, and various agencies at the state and territory level will continue to provide a leadership role.

Appendix 1 The Weeds of National Significance initiative and its phases¹

In 2007, an independent review of the WoNS initiative concluded that the nationally strategic approach of WoNS was highly successful in leveraging consistent multijurisdictional activity on high-priority weed species. This initial review was followed by a detailed review of the inaugural WoNS species by the Australian Weeds Committee (AWC) in 2009–10. The AWC reviewed the implementation of the 20 WoNS national strategies and, in light of achievements for these 20 species, considered the capacity for national coordination of additional WoNS species.

Following the reviews, the Natural Resource Management Ministerial Council (Resolution 15.7, 21 May 2009) endorsed a three-phased approach to national management of WoNS species (Figure 5). This ‘phased approach’ aims to provide the most cost-effective use of limited ‘national coordination’ resources.

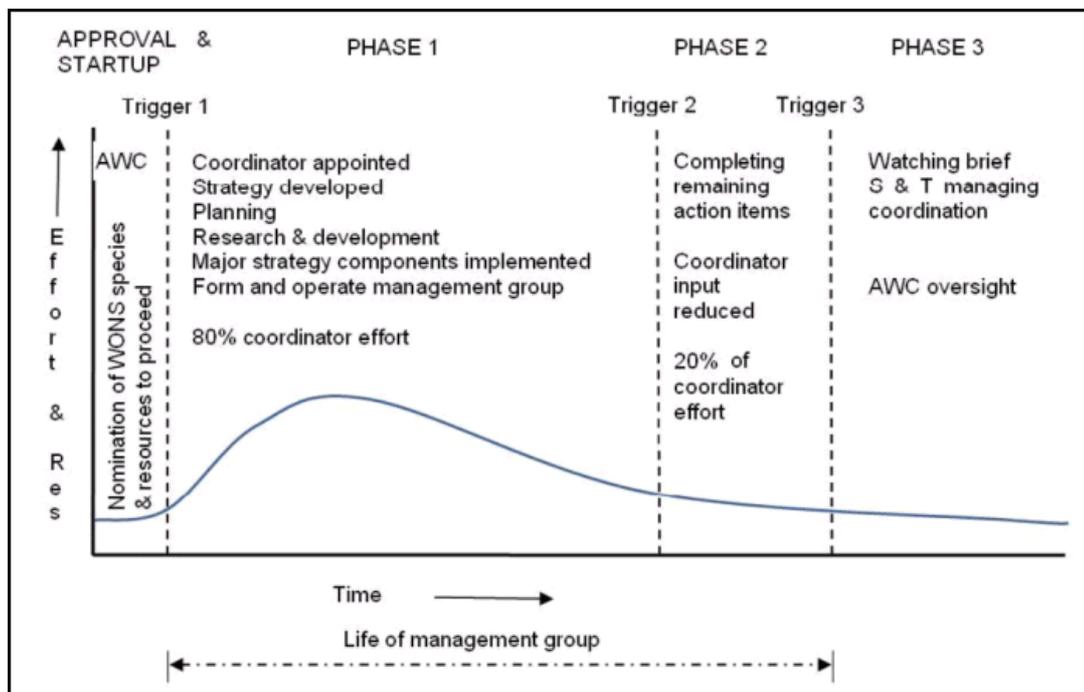


Figure 5 Australian Weed Committee diagrammatic representation of coordinator effort and resource use when implementing a Weeds of National Significance strategy

The phased approach recognises the need for reduced national coordination (‘phasing down’) of WoNS species that are under effective national management, and allows for further weed species to be nominated for consideration as additional WoNS. The AWC is implementing these reforms, and national coordination of the inaugural 20 WoNS species has already transitioned to phase 2 or 3, depending on the species. No species have yet

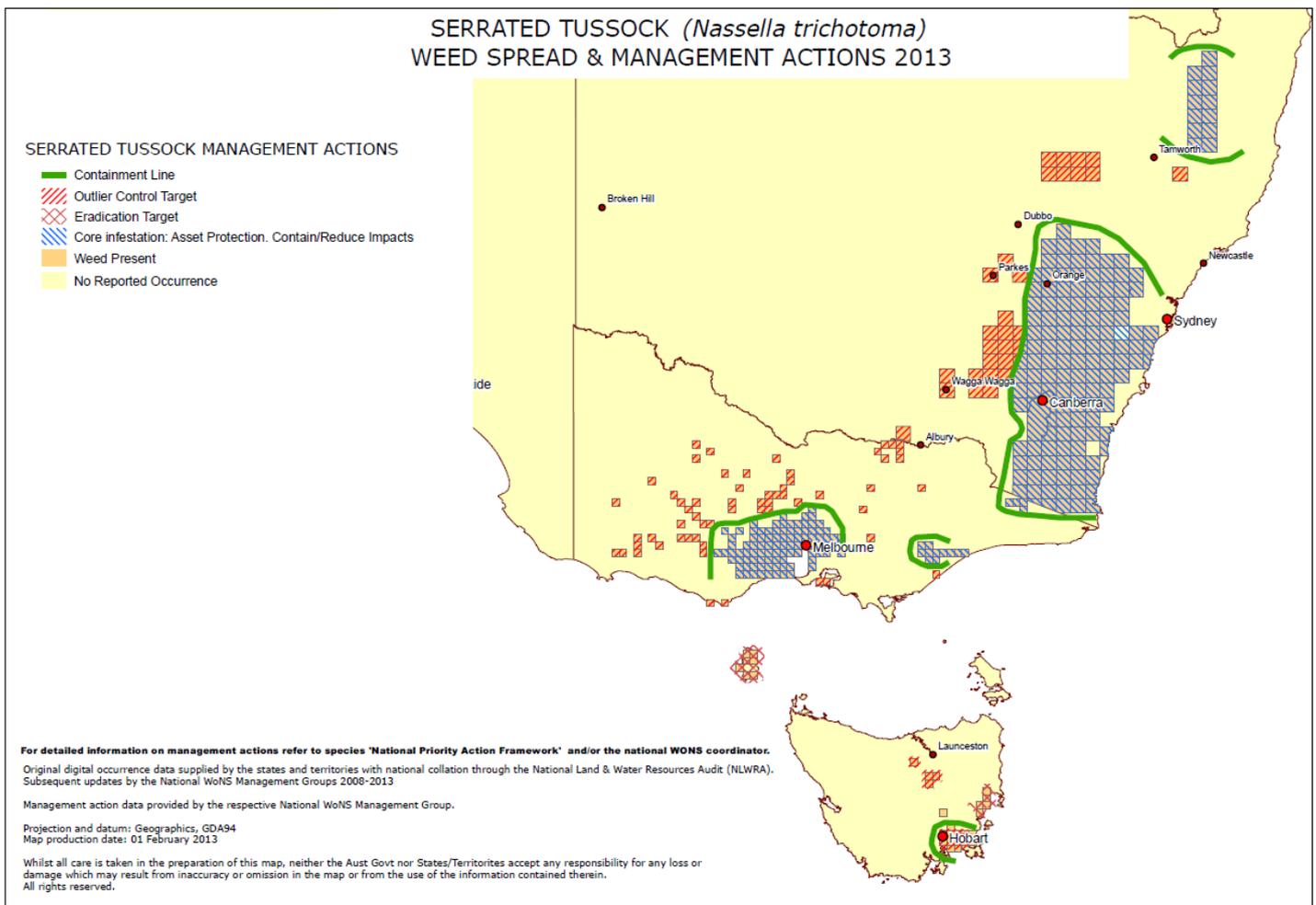
¹ Adapted from Thorp 2012, *Additional list of Weeds of National Significance*, <www.org.au/WoNS>.

been removed from the WoNS list. The AWC is developing a protocol to guide future decisions about when this should occur on a case-by-case basis.

In 2010, jurisdictions nominated additional candidate WoNS species. These species were independently assessed, and the AWC endorsed 12 additional 'species' to be listed as WoNS. The AWC Chairman, Dr Jim Thompson, announced these additional plant species as WoNS on 20 April 2012. Additional information on the selection of these species and the phased approach is available on www.weeds.org.au/WONS.

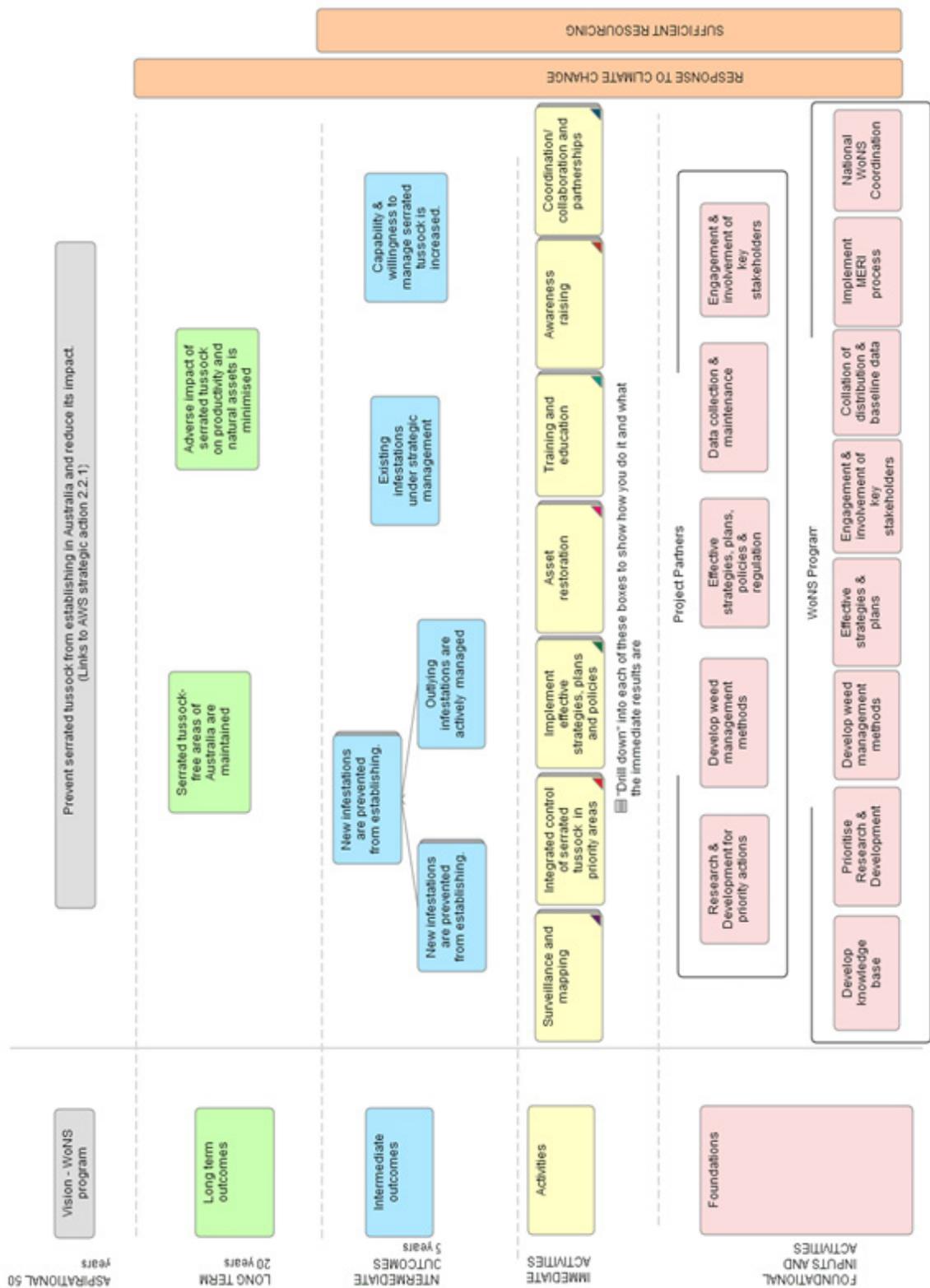
Appendix 2 National serrated tussock distribution and management zone map, February 2013

The priority management actions for serrated tussock outlined in goals 1–3 of the strategic plan are reflected in the national weed spread and management map below.



Appendix 3 Program logic model for the serrated tussock strategic plan

WoNS Program Logic for Serrated Tussock National Strategy



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