

## 1.1 GOAL 1: New infestations are prevented from establishing

As shown in figure x.x, climate suitability modelling indicates that Chilean needle grass has not reached its potential distribution. It is therefore worth placing considerable emphasis within the National Strategic Plan on strategic actions that will ensure CNG does not establish outside of current core infestations. Goal 1 of the Strategic Plan seeks to achieve this by identifying and implementing legislative and policy actions (1.1), mapping (1.2), increasing early detection capabilities (1.3), and through on ground actions to eradicate (1.4) and contain (1.5) existing infestations.

Objectives Activity (from program logic)	Strategic Actions	Priority	Responsibility	Performance Indicators
<b>1.1 Review and enforce relevant national and state legislation</b>	1. Maintain declaration of CNG as a noxious weed in all states and territories and facilitate periodic review of the status, maintaining a minimum of prohibition of sale and movement.	1	State/Territory agencies, local govt	Legislation provides adequate support for strategic on-ground activities to be achieved.
	2. Assess effectiveness of current prohibition of movement legislation as a means of reducing spread.	1		
	3. Investigate ways to improve implementation of legislation that prohibits movement of CNG as a means of reducing spread.	1		
	4. Maintain importation restrictions on <i>Nassella neesiana</i> / <i>Stipa nessiana</i> , <i>N. charruana</i> / <i>S. charruana</i> , <i>N. tenuissima</i> / <i>S. tenuissima</i> and <i>N. trichotoma</i> / <i>S. trichotoma</i>	2	A Q IS	
<b>1.2 Record, map and analyse all infestations.</b>  Activity: Surveillance and Mapping	1. Update data (and maps) to maintain accuracy of all infestations (including containment and eradication areas) in line with national WONS mapping guidelines (McNaught, <i>et. al.</i> 2006).	1	State/Territory agencies, regional NRM bodies, local govt with NCNGTF oversight.	All infestations recorded, mapped in a consistent manner.
	2. Collate updated distribution and density data and maintain national repository (when established). Use data to produce management action maps.	1	AG, State/Territory agencies; local Govt and NRM regions	- National maps updated and available on web. - Maps used as planning tool by stakeholders - CNG mapping data available on national portal
<b>1.3 Develop and maintain early detection mechanisms to protect uninvasion areas.</b>  Activity:	1. Develop, update and distribute identification tools (noting regional variability in morphology) for CNG and other <i>Nassella</i> weeds, and facilitate training opportunities to increase the capacity for early detection.	1	State/Territory agencies, regional NRM bodies, local govt with NCNGTF oversight.	Up-to-date extension materials and other information disseminated to key 'early detection' areas
	2. Identify national pathways of spread. Identify and engage with key stakeholders and promote early detection and hygiene measures.	1	State/Territory agencies, regional NRM bodies, local govt with NCNGTF oversight.	National pathways of spread identified Key stakeholders engaged request early detection & hygiene practises annually from identified stakeholders

Surveillance and Mapping	3. Develop early detection capabilities in WA through actions identified in 1.2.1 – 1.2.3	1	WA Govt with support from other State/Territory agencies and the NCSGTF	Management plans developed for all newly reported infestation.
	4. Maintain surveillance and monitoring programs in identified regions (refer to annual priority action list), including the following SA NRM regions: - South East NRM - Northern and Yorke NRM	1	Relevant State/Territory agencies with assistance from relevant NRM regions, local govt and landholders	Key regions identified Key stakeholders trained in CNG identification, management and hygiene protocols.
	5. Develop and implement Integrated weeds management plans to address newly reported infestations.	2	State/Territory weed control authorities or landholders (depending on State/Territory legislation)	Surveys conducted annually; new infestations reported, mapped and treated Areas surveyed marked as 'weed absent';
	6. Periodic review of CNG potential spread modelling under different climate change scenarios	3	State/Territory agencies and researchers	Greater awareness of potential threat under climate change scenarios
<b>1.4 Maintain and monitor eradication programs.</b>  Activity: Integrated control in priority areas	1. Establish, maintain and monitor CNG eradication programs where feasible and necessary, including maintain existing eradication programs in Tasmania and Queensland	1	Relevant State/Territory Agency with assistance from relevant NRM regions and local Govts.	CNG eradication program carried out annually; all known infestations treated annually; management plans in place for all infestations
<b>1.5 Prevent spread through the development, maintenance and progression of containment programs and the adoption of hygiene protocols</b>  Activity: Integrated control in priority areas	1. Maintain and monitor the management program in Adelaide and Mount Lofty ranges NRM region to significantly reduce the extent of CNG and contain Texas needle grass.	1	SA Govt; AMLR NRM board with assistance from local Govt and landholders.	Management plans developed and active management occurring within containment zones.
	2. Establish and maintain containment lines and zones in identified NSW/ACT NRM regions (refer to annual priority action list), including: - Northern Rivers - Borders Rivers/Gwyder - Namoi - Central West	1	ACT Govt, NSW local Govts; with the assistance of NRM regions and landholders.	
	3. Establish voluntary outlier control targets in identified Victorian NRM regions (refer to annual priority action list), including: - Wimmera CMA - Glenelg Hopkins CMA - East Gippsland CMA	2	Victorian Govt , NRM regions; local govt and landholders.	Control targets agreed and active management occurring.

## 1.2 GOAL 2: Existing infestations under strategic management

Chilean needle grass has become well established across much of its current range in Australia. In these core areas, eradication is no longer considered a realistic management objective, and the emphasis has shifted to reducing the impact of existing infestations, preventing further spread and protecting key assets, both environmental and agricultural. An asset-based approach to invasive species management requires a holistic approach to managing threats. Actions listed below are therefore inclusive of other stipoid grass weeds as well as CNG.

Actions outline below seek to establish biological control as an important tool for the management of core infestations (2.1); identify and prioritise assets impacted by stipoid grass weeds (2.2); and emphasises the importance of re-establishing competitive native grasslands and pasture systems both during and post control (2.3).

Objectives Activity (from program logic)	Strategic Actions	Priority	Responsibility	Performance Indicators
<b>2.1 Investigate and introduce biological controls to reduce the impact of large and/or well established infestations (i.e. 'core' infestations).</b>  Activity: Integrated control in priority areas	1. Complete investigations into potential biocontrol agents ( <i>Uromyces pencanus</i> , <i>Puccinia nassellae</i> , <i>P. graminella</i> ) and where appropriate gain approval for their release.	1	Victorian Govt with support from AG and State/Territory agencies.	<i>Biocontrol agents</i> approved for release in Australia  Biocontrol agents are being readily utilised within appropriate core infestations
	2. Facilitate further research on biological control options for CNG and other <i>Nassella</i> grasses.	1	AG, State/Territory agencies with oversight by NCSGTF.	
	3. Establish nurseries throughout Australia for mass rearing of agents.	2	State/Territory agencies and regional NRM bodies, with support from local govt and the community.	
	4. Develop extension materials to promote the use of biological agents once available.	2		
<b>2.2 Identify priority assets and implement strategic management for their protection</b>	1. Identify, publish and prioritise assets (both environmental and agricultural) at regional, state and national level, focussing on those that are threatened by the invasion of CNG other <i>Nassella</i> Spp. or stipoid grass weeds generally.	1	relevant State/Territory agencies, regional NRM bodies, with support from local govt. NCSGTF to support and influence this action.	Assets identified and attributes described.
	2. Develop, adopt and resource plans to protect/manage high priority assets from key threats including CNG, other <i>Nassella</i> Spp. and stipoid grass weeds generally.	1	AG, State/Territory agencies & regional NRM bodies, with support from local govt, as appropriate.	Management plans in place.
	3. facilitate the establishment of weed exclusion zones around identified key assets where appropriate	2	State/Territory agencies, regional NRM bodies, with support from local	

			govt & community groups.	
<b>2.3 Enhance recovery post control</b>  Activity; Asset restoration	1. Monitor post-control native grassland/pasture recovery and restoration where required to reduce the likelihood of stipoid grass weed reestablishment.	1	State/Territory agencies, local Govts, NRM regional bodies, with support from community groups.	Monitoring of CNG control and response of natives/pastures in place
	2. Develop example restoration guidelines and work with NRM regions and farming programs and initiatives to develop guidelines for each region.	2	State/Territory agencies, local Govts and NRM regional bodies.	Restoration guidelines developed
	3. Promote further research and improvement of post-control restoration techniques and incorporate restoration into NRM policy and planning.	3	State/Territory agencies, local Govts, researchers, agricultural industry, NRM regional bodies.	Restoration techniques and tools available; NRM policy and plans include restoration of resilient ecosystems

### 1.3 GOAL 3: Greater capability and commitment to manage Chilean needle grass

Successful management of both outlier and core infestations of CNG relies heavily on weed managers having the necessary skills to identify and control it, as well as a long term commitment to its management. Goal three of the strategic plan sets out actions that aim to increase the capability and commitment to CNG management, and hence facilitate the actions set out in Goals 1 and 2.

Goal 3 of the strategic plan aims to ensure that CNG management is integrated with the management of other stipoid grass weeds and more broadly with NRM management through multi regional partnerships and linkages (3.1). It also seeks to further refine and increase adoption of existing best practice management (3.2); increase the awareness and capability of weed managers to manage CNG (3.3); and maintain the effectiveness and relevance of the national strategy (3.4).

Objectives Activity (from program logic)	Strategic Actions	Priority	Responsibility	Performance Indicators
<b>3.1 Develop landscape scale partnerships to deliver integrated land management</b>  Activity: collaboration, coordination & partnerships	1. Develop multi-regional plans through stakeholder collaborations that embed stipoid weed management into broader land /farm management.	1	All stakeholder groups	Multi regional plans in place
	2. Establish links with agricultural programs and initiatives such as Evergraze/Prograze, Sustainable Grazing Systems and Future Farming Industries CRC.	1	All stakeholder groups	Partnerships developed with other programs and initiatives.
<b>3.2 Refine and adopt best practice management tools and techniques.</b>  Activity: Research Awareness raising;	1. Increase the awareness, acceptance and adoption of existing integrated BPM techniques. Use landscape-scale programs such as whole of farm initiatives (refer to 3.1.2), and Landcare as conduits for the delivery of BPM information.	1	State/Territory agencies, NRM regions and local Govts. ag programs	PI required
	2. Continue farm scale trials to refine existing BPM techniques (to increase awareness and adoption).	1	Researchers, State/Territory agencies, NRM regions and local Govts..	BPM refined. New knowledge incorporated into BPM resources.
	3. Review existing hygiene protocols to determine rates of adoption effectiveness, gaps and needs.	1		PI required
	4. Address barriers to current control options.(ie. refine trade advice notices for flupropanate etc).	1	APVMA, researchers, State/Territory agencies.	BPM gaps identified and filled.
<b>3.3 Increase awareness and capability of weed managers to</b>	1. Build capability of weed managers through raising awareness of impacts and the delivery of identification and BPM training for stipoid grass weeds.	1	State/Territory agencies, NRM regions, local Govts &,ag programs.	Weed managers are trained in identification and BPM.

<p><b>manage CNG and other <i>Nassella</i> Spp.</b></p> <p>Activity: Awareness raising, education &amp; training,</p>	<p>2. Assist land managers, including community groups and individuals in obtaining resources to implement/undertake weed management.</p>	<p>1</p>	<p>State/Territory agencies, NRM regions, local Govts.</p>	<p>Management information is provided and shared among all stakeholders.</p>
<p><b>3.4 Maintain effectiveness and relevance of, and the commitment to the national strategy.</b></p> <p>Activities: collaboration, National coordination and partnerships</p>	<p>1. Maintain, update and promote list of nation priority actions by region to inform goals 1 and 2 of the strategic plan.</p>	<p>1</p>	<p>NCNGTF</p>	<p>Stakeholders are aware of National priorities and apply them at a local, regional and state level.</p>
	<p>2. Develop and implement management plans at the state regional and local level that reflect National priorities.</p>	<p>1</p>	<p>State/Territory and local governments; NRM regions.</p>	
	<p>3. Maintain an holistic and national approach to stipoid weed management through the continued operation of a national stipoid grass taskforce or equivalent national management network.</p>	<p>1</p>	<p>AG, State/Territory agencies, NRM regions, local Govts</p>	<p>Adequate representation from all stakeholders is supporting a national and integrated approach to <i>Nassella</i> management</p>
	<p>4. Develop and implement a communication plan for the delivery of priority actions within the Strategic Plan</p>	<p>2</p>	<p>AG, State/Territory agencies, NRM regions, local Govts &amp;.ag programs .with NCNGTF. oversight</p>	<p>Stakeholders are aware of National priorities. Action is occurring towards these priorities at a local, regional and state level</p>
	<p>5. Implement a Monitoring Evaluation, Reporting and Improvement (MERI) Strategy</p>	<p>1</p>	<p>AG, State/Territory agencies, NRM regions, local Govts .</p>	<p>MERI data collected, evaluated and reported annually.</p>