



# 11 Significant invasive species

## This Chapter

This chapter summarises investments supported by the NAP and the regional component of the Trust that have a major focus on the significant invasive species matter for target. The first section of the chapter summarises priority action investments approved to the 30 June 2004. It also provides a summary of the type of activities supported by these investments and progress in the achievements of these activities to the 31 March 2004.

The second section of this chapter summarises investments having a major focus on significant invasive species from regional strategies based on accredited regional plans to 30 June 2004. This section also details the specific significant invasive species targets and related management action targets from approved investments. It also provides a summary of the type of activities supported by these investments and progress in the achievements of these activities to the 31 March 2004.

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## Glossary

# 11.1 PRIORITY ACTION INVESTMENTS HAVING A MAJOR FOCUS ON SIGNIFICANT INVASIVE SPECIES

## Approvals and reported expenditure

Investments by the NAP and the regional component of the Trust in priority actions that have a major focus on significant invasive species total approximately \$7.4m. Figure 11.1.1 shows the regions with investments that focus on significant invasive species through this funding. Table 11.1.1 details the approved priority action funding for each region. Table 11.1.2 details the reported expenditure by each of these regions.

**Figure 11.1.1** Regions with priority actions having a major focus on significant invasive species



**Table 11.1.1** Priority actions having a major focus on significant invasive species\*

State	Region	2003-04 Approvals (\$)		Total Approvals to June 2004 (\$)	
		NAP	Trust	NAP	Trust
Australian Capital Territory	Australian Capital Territory				80,000
New South Wales	Hawkesbury - Nepean				730,965
	Southern Rivers				139,775
	Western				110,000
Northern Territory	Northern Territory		701,477		982,333
Queensland	Border Rivers-Balonne-Maranoa		325,000		325,000
	Burnett - Mary		270,000		270,000
	Cape York		675,000		675,000
	Desert Channels		215,000		215,000
	Mackay - Whitsunday				132,600
	Northern Gulf		250,000		250,000
	Southern Gulf		230,000		230,000
South Australia	Aboriginal Lands				555,000
	Mount Lofty Ranges				188,000
	Rangelands				230,000
	SA Murray Darling Basin				75,000
Tasmania	North Tasmania		191,500		191,500
	North West		287,080		287,080
	South Tasmania		390,200		390,200
Victoria	Port Phillip				20,000
	West Gippsland				100,000
	Wimmera				1,104,600
Western Australia	South West		137,100		137,100
<b>Total</b>			<b>3,672,357</b>		<b>7,419,153</b>

\* Figures reflect Australian Government and State/Territory Government approvals for NAP and only Australian Government approvals for the Trust. State/Territory Government cash and in-kind funding for the Trust is not included.

**Table 11.1.2** Reported expenditure for priority actions having a major focus on significant invasive species

State	Region	Budgeted Activity Expenditure (\$)				Reported Activity Expenditure (\$)			
		July 03 - March 04		Total to March 04		July 03 - March 04		Total to March 04	
		NAP	Trust	NAP	Trust	NAP	Trust	NAP	Trust
Australian Capital Territory	Australian Capital Territory		80,000		80,000		80,000		80,000
New South Wales	Hawkesbury - Nepean		428,500		428,500		26,000		26,000
	Western		27,500		27,500				
Northern Territory	Northern Territory		224,685		224,685		111,347		111,347
Queensland	Mackay - Whitsunday		132,600		132,600		71,825		71,825
South Australia	Aboriginal Lands		445,000		445,000		385,000		385,000
	Mount Lofty Ranges		150,400		150,400		94,000		94,000
	Rangelands		186,000		186,000		47,813		47,813
	SA Murray Darling Basin		49,000		49,000		36,000		36,000
Tasmania	North Tasmania		53,500		53,500				
	North West		48,120		48,120				
	South Tasmania		130,000		130,000				
Victoria	Port Phillip				20,000		15,000		15,000
	West Gippsland				100,000		18,750		18,750
	Wimmera				1,104,600		737,925		737,925
Total		1,955,305		3,179,905		1,623,660		1,623,660	

## Activities and achievements

### Funded activities

Funding for the types of priority action activities having a major focus on significant invasive species supported by the NAP and the regional component of the Trust, is shown in Table 11.1.3.

**Table 11.1.3** Types of activities supported by priority actions having a major focus on significant invasive species

Activity Type	Budgeted Activity Expenditure (\$)				Reported Activity Expenditure (\$)			
	July 03 - March 04		Total to March 04		July 03 - March 04		Total to March 04	
	NAP	Trust	NAP	Trust	NAP	Trust	NAP	Trust
Resource assessment		666,785		666,785		350,822		350,822
Planning		178,120		178,120				
Capacity building		54,000		54,000				
On-ground activities		1,056,400		2,281,000		1,272,838		1,272,838
Total		1,955,305		3,179,905		1,623,660		1,623,660

Funding for each priority action activity with a major focus on significant invasive species supported by the NAP and the regional component of the Trust is described in Table 11.1.4.

**Table 11.1.4** Funding for priority action activities having a major focus on significant invasive species

Region	Activity Title	Budgeted Activity Expenditure (\$)				Reported Activity Expenditure (\$)			
		July 03 - March 04		Total to March 2004		July 03 - March 04		Total to March 2004	
		NAP	Trust	NAP	Trust	NAP	Trust	NAP	Trust
<b>Australian Capital Territory</b>									
Australian Capital Territory	Autumn Feral Animal and Weed Control		30,000		30,000		30,000		30,000
	Spring Weed Control		50,000		50,000		50,000		50,000
<b>New South Wales</b>									
Hawkesbury - Nepean	Biological Control of Alligator Weed - Native Range Surveys for New Agents		102,000		102,000				
	Coordinated Pest Animal Control Within the Warragamba Catchment		500		500				
	Hawkesbury Weed Harvester		300,000		300,000				
Hawkesbury - Nepean	Model Catchment Plan Addressing Nutrient and Pest Species Management in the Catchment of a Wetland of National Importance - Long Neck Lagoon.		26,000		26,000		26,000		26,000
Western	Prioritising Pest Animal and Weed Threats in the Western Catchment		27,500		27,500				
<b>Northern Territory</b>									
Northern Territory	Biological Control of Mimosa pigra and Integration with other control Options		224,685		224,685		111,347		111,347
<b>Queensland</b>									
Mackay - Whitsunday	Mackay Whitsunday PAP1 Mimosa Pigra		132,600		132,600		71,825		71,825
<b>South Australia</b>									
Aboriginal Lands	Feral animal control on Aboriginal Managed Lands in South Australia		165,000		165,000		130,000		130,000
	Reducing the damage caused by feral species to the Anangu Pitjantjatjara Lands		150,000		150,000		150,000		150,000
	Weed control on Aboriginal Managed Lands in South Australia		130,000		130,000		105,000		105,000
Mount Lofty Ranges	Maintenance of Regional Control Programmes for Nationally Rated Pest and Diseases		150,400		150,400		94,000		94,000
Rangelands	Arid Recovery Project		16,000		16,000		8,000		8,000
	Integrated rabbit control and revegetation recovery in pastoral areas		30,000		30,000		17,650		17,650
	Rangeland Action Project		140,000		140,000		22,163		22,163
SA Murray Darling Basin	Protecting Biodiversity on Narrung Peninsula through integrated vertebrate pest control		49,000		49,000		36,000		36,000

Region	Activity Title	Budgeted Activity Expenditure (\$)				Reported Activity Expenditure (\$)			
		July 03 - March 04		Total to March 2004		July 03 - March 04		Total to March 2004	
		NAP	Trust	NAP	Trust	NAP	Trust	NAP	Trust
<b>Tasmania</b>									
North Tasmania	Investigate Distribution and Control of <i>Gambusia holbrooki</i>		53,500		53,500				
North West	Northwestern Regional Weed Management Strategy		48,120		48,120				
South Tasmania	Managing Serrated Tussock in Tasmanian		130,000		130,000				
<b>Victoria</b>									
Port Phillip	Bluebell Creeper Control - Coastal				20,000		15,000		15,000
West Gippsland	Sea Level Change Implications for the Gippsland Coast				100,000		18,750		18,750
Wimmera	Integrated biodiversity works in the Wimmera				895,500		671,625		671,625
	Protecting biodiversity through management of Bridal creeper and other weeds of national significance				146,000		42,675		42,675
	Reducing the risk of rabbit control works and the environment				63,100		23,625		23,625
<b>Total</b>		-	1,955,305	-	3,179,905	-	1,623,660	-	1,623,660

## Achievements

The outputs, or products and services produced by these activities, are summarised in four tables according to the types of outputs described in Chapter 1. Summaries of the outputs related to resource assessment, planning, capacity building and on-ground activities are shown in Table 11.1.5, Table 11.1.6, Table 11.1.7 and Table 11.1.8

**Table 11.1.5** Priority action resource assessment outputs related to significant invasive species

Standard Output	July 03 - March 04			Total to March 04		
	NAP	Trust	Joint	NAP	Trust	Joint
<b>Baseline, trend or condition studies for targets</b>						
Number of sites monitored			1			1
Number of studies undertaken			2			2
<b>Decision support tools</b>						
Number models, information management systems and other decision support tools developed			3			3
<b>Investigations (survey, inventory and mapping and data analysis)</b>						
Number undertaken			183			183
<b>Research and development studies</b>						
Number undertaken			4			4

**Table 11.1.6** Priority action planning outputs related to significant invasive species

Standard Output	July 03 - March 04			Total to March 04		
	NAP	Trust	Joint	NAP	Trust	Joint
<b>Improved practice codes or guidelines</b>						
Number developed			6.5			6.5
<b>Integrated catchment or sub-catchment plans</b>						
Number developed			24			24

**Table 11.1.7** Priority action capacity building outputs related to significant invasive species

Standard Output	July 03 - March 04			Total to March 04		
	NAP	Trust	Joint	NAP	Trust	Joint
<b>Awareness raising activities</b>						
Number of demonstrations, field days, study tours and other non-training forums held			10			10
Number of participants in person-days at demonstrations, field days, study tours and other non-training forums			80			150
Number of brochures, newsletters, displays and other non-training products developed			32			33
Number of media opportunities including websites developed			20			20
<b>Facilitation motivation and support activities</b>						
Number of active positions (FTE) supported			13			13
Number of community groups or projects assisted			9			9
<b>Skills and training activities</b>						
Number of training sessions, workshops seminars and other events held			14			14
Number of participants in person-days at training sessions, workshops seminars and other events			60			60

**Table 11.1.8** Priority action on-ground activity outputs related to significant invasive species

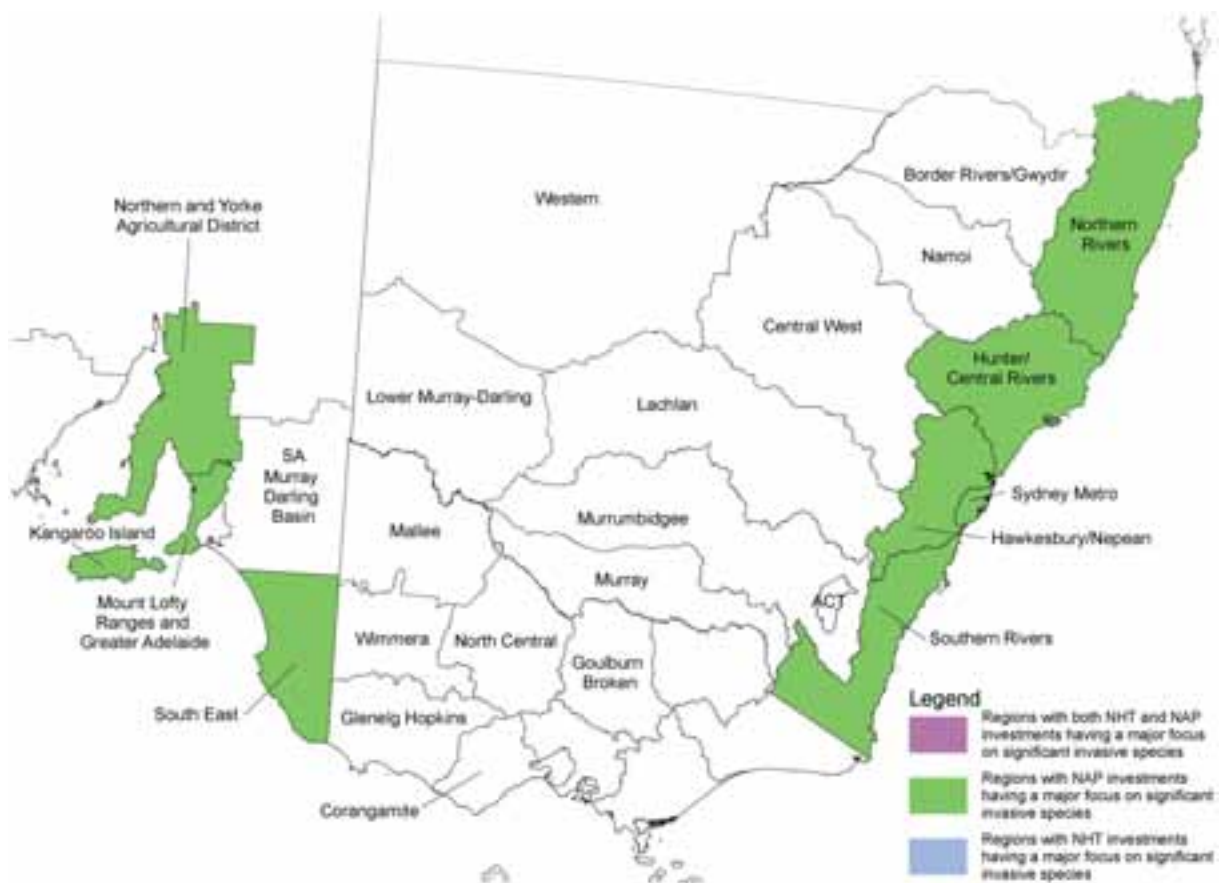
Standard Output	July 03 - March 04			Total to March 04		
	NAP	Trust	Joint	NAP	Trust	Joint
<b>Indigenous vegetation protected by fencing</b>						
Area (hectares) protected			39			39
<b>Management of significant species or ecological communities</b>						
Area (hectares) protected by fencing specifically for significant species/community protection			6000			6000
<b>Significant pest plant control</b>						
Area (hectares) of pest plant control			180			180
Area (hectares) of pest plant control			37050			37050
Area (hectares) of pest animal control			179000			179000
<b>Significant pest vertebrate control</b>						
Area (hectares) of pest animal control			22200			22200

## 11.2 REGIONAL INVESTMENTS HAVING A MAJOR FOCUS ON SIGNIFICANT INVASIVE SPECIES

### Approvals and reported expenditure

Funding through regional investment strategies based on accredited regional plans commenced after 30 June 2003. Investment strategies based on accredited regional plans have been approved for regions in the Australian Capital Territory, New South Wales, South Australia and Victoria. Up to 30 June 2004, investments having a major focus on significant invasive species total approximately \$1m. Figure 11.2.1 shows the regions having a major focus on significant invasive species through this funding. Table 11.2.1 and Table 11.2.2 respectively show the approved funding and the reported expenditure by region through its investment strategy.

**Figure 11.2.1** Regions having a major focus on significant invasive species



**Table 11.2.1** Regional investments having a major focus on significant invasive species\*

State	Region	2003-04 Approvals (\$)		Total Approvals to June 2004 (\$)	
		NAP	Trust	NAP	Trust
New South Wales	Hawkesbury - Nepean		175,000		175,000
	Hunter - Central Rivers		160,000		160,000
	Northern Rivers		125,000		125,000
	Southern Rivers		251,000		251,000
	State-wide				
	Sydney Metro		150,000		150,000
South Australia	Kangaroo Island		92,000		92,000
	Mount Lofty Ranges		33,300		33,300
	Northern and Yorke Agricultural District		18,580		18,580
	South East		6,600		6,600
Total		1,011,480		1,011,480	

\* Figures reflect Australian Government and State/Territory Government approvals for NAP and only Australian Government approvals for the Trust. State/Territory Government cash and in-kind funding for the Trust is not included.

**Table 11.2.2** Reported expenditure for regional investment having a major focus on significant invasive species

State	Region	Budgeted Activity Expenditure (\$)				Reported Activity Expenditure (\$)			
		July 03 - March 04		Total to March 04		July 03 - March 04		Total to March 04	
		NAP	Trust	NAP	Trust	NAP	Trust	NAP	Trust
New South Wales	Hunter - Central Rivers		100,000		100,000				
	Northern Rivers		67,000		67,000				
	Southern Rivers		171,000		171,000				
Total		338,000		338,000					

## Activities and achievements

### Funded activities

Funding for the types of regional investment activities having a major focus on significant invasive species supported by the NAP and the regional component of the Trust, is shown in Table 11.2.3.

**Table 11.2.3** Funding for the types of regional investment activities having a major focus on significant invasive species

Activity Type	Budgeted Activity Expenditure (\$)				Reported Activity Expenditure (\$)			
	July 03 - March 04		Total to March 04		July 03 - March 04		Total to March 04	
	NAP	Trust	NAP	Trust	NAP	Trust	NAP	Trust
On-ground activities		338,000		338,000				
Total		338,000		338,000				

Funding for regional investment activities having a major focus on significant invasive species is described in Table 11.2.4.

**Table 11.2.4** Funding for activities addressing significant invasive species from regional strategies

Region	Activity Title	Budgeted Activity Expenditure (\$)				Reported Activity Expenditure (\$)			
		July 03 - March 04		Total to March 2004		July 03 - March 04		Total to March 2004	
		NAP	Trust	NAP	Trust	NAP	Trust	NAP	Trust
New South Wales									
Hunter - Central Rivers	Invasive Weed Control Aquatic Weeds in Urban Areas		30,000		30,000				
	Invasive Weed Control Cats Claw Creeper		70,000		70,000				
Northern Rivers	Lord Howe Island Weed and Pest Management		42,000		42,000				
	Weed Control on the Tablelands (Part i)		15,000		15,000				
	Weed Control on the Tablelands (Part ii - Urban)		10,000		10,000				
Southern Rivers	Coordinated Vertebrate Pest Control Program for Eden sub-region		10,000		10,000				
	Illawarra and Shoalhaven Coastal Land Restoration		75,000		75,000				
	Kangaroo River and Broughton Creek Privet Reduction Program		26,000		26,000				
	Snowy River Recovery Program		60,000		60,000				
Total		-	338,000	-	338,000	-	-	-	-

# Significant invasive species targets

## Resource condition targets related to approved investment activities

Significant invasive species targets are shown in Table 11.2.5

**Table 11.2.5** Resource condition targets for significant invasive species

Region	Resource condition target
Australian Capital Territory	
Australian Capital Territory	Ecologically significant invasive species managed to minimise threats to biodiversity (with target to be set by 2006)
New South Wales	
Southern Rivers	By 2012, the area of land affected by land degradation problems including weed infestations, will not exceed the 2003 baseline
South Australia	
Aboriginal Lands	Introduced plants and animals not impacting significantly upon natural biodiversity by 2015
Kangaroo Island	Pests and diseases eliminated (where practical) contained, managed and no further species introduced by 2020
	Priority pests and diseases eliminated (where practicable) contained and managed on primary production land by 2020
	Tourism operations having minimal impact on the natural resources of the region (on-going)
	No new pests and diseases established on Kangaroo Island
	Pests, diseases and problems animals eliminated (where possible) managed and controlled to have minimal impact in key biodiversity areas by 2020
Mount Lofty Ranges	A progressive increase in the extent of disproportionately cleared vegetation communities towards a vision of all communities occupying at least 30% of their original extent, with clear targets established by June 2006
	No net degradation of natural biodiversity associated with fire management activities: by Dec 2007
	Progressive decrease in distribution and abundance of marine pests, with clear targets established: by June 2006
	Pests (plants and animals) and diseases contained and managed and no increase in impact upon terrestrial and aquatic biodiversity (including marine) by 2022
Northern and Yorke Agricultural District	New introduction of pests and diseases prevented from establishing: by Dec 2010
	Progressive decrease in distribution and abundance of marine pests, with clear targets established: by June 2006
Rangelands	Strategic planning and policy framework established to manage biodiversity and important habitat areas by 2007
	Implement on-ground activities to manage pest plant and animal populations by 2006
	Regional strategies for managing total grazing pressure produced and adopted by 2006
	Regional strategies to manage changes to vegetation communities developed and adopted by 2007
	Reduction in distribution/abundance/impacts of pest plant and animal species at priority management areas by 2014
	Review of research and data collation needs to improve biodiversity management and prevent further habitat loss or ecosystem modification, completed by 2006
	Regional biodiversity work prioritised and current on-ground actions implemented and reviewed by 2005
	Review of research and data collation needs to improve the understanding and application of integrated pest management practices, completed by 2006
South East	Current and predicted trends in the salinity of groundwater in the unconfined aquifer used for productive purposes remain within acceptable levels by 2011 and beyond
Northern and Yorke Agricultural District	Pest plants (including environmental weeds), pest animals & diseases not impacting significantly upon primary production, significant biodiversity areas & sites for priority species & ecological communities by 2020

## Management action targets related to approved investment activities

Accredited regional plans detail management action targets primarily related to significant invasive species targets. Management action targets are shown in Table 11.2.6.

**Table 1.4.6** Management action targets related to significant invasive species

Region	Management action target
<b>Australian Capital territory</b>	
Australian Capital Territory	By 2006, threats (invasive plant and animal species, fire and human associated impacts) to biodiversity, especially threatened species and communities will be minimised
<b>New South Wales</b>	
Hawkesbury - Nepean	By 2006, implement adequately funded and closely linked strategies and effective actions plans for all major and potential terrestrial and aquatic weed/pest species
	By 2012, the whole community aims to reduce the area of land infested by pest plants and animals to below 2002 levels
Hunter - Central Rivers	Effective management structures and programs for coordinating and implementing control of pest species and fire are in place by 2004
Murrumbidgee	By 2012, assist land managers and communities to reduce the species diversity ratio of alien to native fish by 25%. Reduce the abundance ratio by 50%
Northern Rivers	By 2006, strategies in place for the improved management of pest plants, pest animals and fire to enhance catchment production and biodiversity values
Southern Rivers	By 2005, a process will be in place to maintain the weed and pest-free status of all areas that are free of pests and weeds. This will include community education, information sharing and coordination of land managers
	By 2005, a regional weed control strategy will be prepared and implemented for priority weeds
	By 2005, collaborative programs will be in place to manage targeted pest species
	By 2005, the following pest animals levels will be reduced in accordance with the management plans of the regulatory authority
	By 2012, the area of public and private land and waters (within specified sub regions) infested with following high priority weeds will not exceed year 2000 levels
Sydney Metro	By 2013, the threats posed to aquatic and terrestrial ecosystems by pest species are measurably reduced
Western	2.3 million ha under ongoing management to prevent scrub encroachment within 10 years of Blueprint approval
	Decrease area of scrub dominated landscapes by 200,000 ha within 10 years of Blueprint approval
<b>South Australia</b>	
Aboriginal Lands	Implement integrated programs for control of feral animals & plants by June 2005
	Support existing initiatives to develop strategies for feral animals & plants
Eyre Peninsula	All priority pest plants and animals identified, mapped and management plans being implemented to prevent further degradation or threat to threatened species and key habitat by 2010
Kangaroo Island	Establish adequate bio-security measures to minimise the risk of new introductions to Kangaroo Island by December 2005
	Establish adequate bio-security measures to minimise the risk of tourism contributing to the arrival of new pests and diseases by December 2004
Mount Lofty Ranges	Priority pest plants and animals (including abundant native species) and diseases managed with clear targets by June 2006
Rangelands	Implement on-ground activities to manage pest plant and animal populations by 2006
	Review of research and data collation needs to improve the understanding and application of integrated pest management practices, completed by 2006
	Strategic planning and policy framework established for the integrated management of potential and existing pest plants and animals by 2005
SA Murray Darling Basin	To restrict stock access to 25% of riparian zones in priority areas by 2006.

Region	Management action target
South East	95% of land managers undertaking pest plant and pest animal management activities on their properties by 2010 to decrease the impact of pest plants and animals on agricultural production and the environment
	Determine 10 pest plants and animals with the greatest adverse impact on the natural environment by 2004
	Determine 15 pest plants and animals with the greatest adverse impact on agricultural production by 2004
	Determine the current distribution of the region's 10 most significant environmental pest plants and animals by 2004
	Determine the current distribution of the region's 15 most significant agricultural pest plants and animals by 2004
	Establish benchmark irrigation practices to enable management of risk to groundwater resources to within acceptable limits by 2008
	Underground water is managed within its capability in two priority areas (Padthaway and Keith) by 2008
Northern and Yorke Agricultural District	Establish system for preventing introduction of new pests & diseases & for early detection and priority treatment of any introductions that do occur by December 2005
	Halt and reverse spread of environmental weeds in large remnant and threatened habitat areas by June 2007