



## Pests and biodiversity group of activities

The pests and biodiversity group of activities contributes to the following community outcomes:

- A strong economy
- Business and farming activities do not harm the environment
- Environment, in general, is to be looked after
- Native plants and animals can thrive

Environment Canterbury works closely with the community and other partners as the lead agency for managing and controlling pests specified in the Regional Pest Management Strategy and undertaking small-scale management programmes (Biosecurity Act 1993). It is also responsible for controlling the use of land to maintain indigenous biodiversity (Resource Management Act 1991).

## KEY ISSUES FOR 2009-19

### Animal pest threats to production from land

With the reducing effectiveness of rabbit haemorrhagic disease, a broader range of control methods are required to keep rabbit numbers down to acceptable levels. Continued effort is required to control wallabies within the wallaby containment area. Ongoing effort is required to eradicate the small residual rook population.

### Plant pest threats to production from land

Containing the spread of plant pests such as gorse and broom, and reducing infestations of nassella tussock, requires ongoing effort to ensure that land is not lost from production. Ongoing effort is required to eliminate plants identified in the total control plant pest programme.<sup>1</sup>

### Animal and plant pest threats to biodiversity

Protection of indigenous biodiversity requires ongoing management to limit the impact of animal pests and the spread of specific plant pests such as wilding conifers, boneseed, old man's beard and wild thyme.

### Decline in regional biodiversity

Pests, including wilding conifers, boneseed, possums and feral goats, threaten biodiversity values. Land and water management practices can also impact on biodiversity values. Both can result in loss of species and habitat, which can be difficult to reverse. Appropriate management to limit these impacts is often necessary.

### Bovine Tb programme

In areas where the bovine Tb control programme has been successful, national level funding will cease. This means communities will need to consider how to maintain pests at low levels and ensure benefits to biodiversity are not lost.

Following the shift to greater Animal Health Board control of the Canterbury portion of the national programme, ratepayers have considered whether it is still appropriate for Environment Canterbury to continue collecting targeted rates for bovine Tb to contribute the local share to the national programme.

>> Rating for bovine Tb control. Go to page 86.

### New pest incursions

The ongoing threat of introduction of new plant and animal pests requires vigilance, and co-ordination with communities and government agencies. Climate change may also contribute to the introduction of new pests, as a result of warmer temperatures.

## Effect on the four well-beings

Controlling animal and plant pests is essential for rural Canterbury's economic well-being. There are also benefits to indigenous biodiversity, resulting in enhanced environmental well-being.

Protecting, maintaining and restoring assets, such as braided rivers, lakes and wetlands, will enhance environmental well-being. Social and cultural well-being is enhanced as a result maintaining quality of life and a sense of regional and national identity.

There is the potential for the use of some pesticides to have a negative impact on indigenous biodiversity, affecting environmental well-being. This is mitigated through the application of best practice and strict observance of resource consent conditions.



SOCIAL



ECONOMIC



ENVIRONMENTAL



CULTURAL

## Involving the community

- The Regional Biodiversity Strategy Advisory Group and biodiversity steering group bring a collaborative approach to biodiversity protection.
- Pest management liaison committees represent and provide advice on work programmes in rating districts.
- Individual landholders, groups of residents, and landcare and river catchment groups work with Environment Canterbury on issues such as wilding conifer control, wetland protection, pest control and riparian restoration.

<sup>1</sup> Total control plants are: African feather grass, African love grass, baccharis, bur daisy, coltsfoot, entire marshwort, saffron thistle and white-edged nightshade.

Note: properties on Kaitorete Spit no longer contribute to the special possum rate for the Banks Peninsula community initiated programme for pest control.

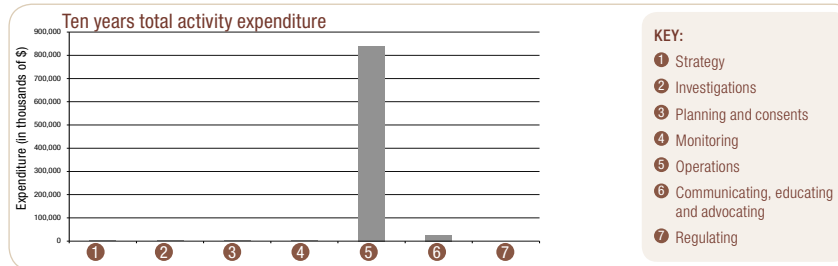
# ACTIVITIES

## Priority over the next 10 years

The focus of this group of activities is on controlling pests and protecting, maintaining and enhancing biodiversity.

We will undertake the following activities:

- 1 Strategy**  
Continue implementing and developing strategies for pests and biodiversity.
- 2 Investigations**  
Investigating pest and biodiversity related issues.
- 3 Planning and consents**  
Developing policy for managing pests and biodiversity and assessing implementation and effectiveness.
- 4 Monitoring**  
Monitoring trends and state of pests and biodiversity.
- 5 Operations**  
Implementing pest and biodiversity management programmes.
- 6 Communicating, educating and advocating**  
Informing the community about pest and biodiversity issues and engaging with all partners.
- 7 Regulating**  
Managing compliance and enforcement of the requirements of the Regional Pest Management Strategy 2005.



## WORK PROGRAMMES FOR 2009/10 TO 2018/19:

- 1 Strategy**  
**Years 2009/10 to 2018/19**
  - Contribute to strategic development of an approach to pest issues.
  - Contribute to strategic development of an approach to biodiversity issues, including identification of priority biodiversity sites for management.
  - Prepare biodiversity management plans for high priority sites.**Years 2013/14, 2018/19**
  - Review Canterbury Regional Biodiversity Strategy.
- 2 Investigations**  
**Years 2009/10 to 2018/19**
  - Investigate new pest control tools.
  - Research the ecology of pest species.
- 3 Planning and consents**  
**Years 2009/10 to 2018/19**
  - Prepare and report on Regional Pest Strategy Operational Plans.
  - Respond to national initiatives for pests.
  - Work with communities to develop community-initiated programmes.
  - Assess implementation and effectiveness of pest management and biodiversity strategies.**Years 2009/10 to 2014/15**
  - Review Canterbury Regional Pest Management Strategy.
- 4 Monitoring**  
**Years 2009/10 to 2018/19**
  - Monitor and report trends for infestations of total, progressive and containment plant pests.<sup>2</sup>
  - Monitor and report effectiveness of biodiversity and pest control programmes.
  - Undertake surveillance for potential pests.
  - Monitor indigenous ecosystems including wetlands, forest remnants, exotic tree spread.

UNCERTAINTIES	ASSUMPTIONS
For 2009-19, the following is uncertain:	For 2009-19, it is assumed that:
a) The funding commitment to the Canterbury Biodiversity Strategy.	a) Partner agencies will continue to fund the Canterbury Biodiversity Strategy.
b) The number and scale of new pest incursions.	b) Provision has been made for limited response to new pest incursions.
c) The future effectiveness of rabbit haemorrhagic disease.	c) Rabbit haemorrhagic disease will become less effective and other control tools will be required.
d) The implications of climate change on the environment.	d) That there will be some long-term adverse impact on biodiversity values. However, no immediate provision has been made.

<sup>2</sup> For a list of total, progressive and containment plant pests see the Canterbury Regional Pest Management Strategy 2005-2015.

## 5 Operations

Years 2009/10 to 2018/19

- Undertake rook control.
- Undertake rabbit control in the Banks Peninsula Pest Rating District.
- Undertake possum control within the Community Initiated Programme area on the Banks Peninsula.
- Control pests in targeted areas to protect indigenous biodiversity.
- Undertake small-scale management programmes to eradicate newly-identified pests which have the potential to become invasive.
- Release bio-control agents in rating districts.
- Undertake operations to remove total control plant pests prior to seeding.
- Undertake wilding conifer control in targeted areas.
- Hold a region-wide consent for the use of 1080.
- Contribute to bovine Tb control programmes.

## 6 Communicating, educating and advocating

Years 2009/10 to 2018/19

- Facilitate pest management liaison committees throughout Canterbury.
- Provide information to the community and raise awareness about the management and control of pests and biodiversity issues.
- Support indigenous biodiversity through the Environment Enhancement Fund.
- Contribute to Canterbury Biodiversity Strategy inter-agency partnerships.
- Work with landholders to protect wetlands and remaining indigenous habitats.
- Communicate with landholders to co-ordinate rabbit control operations involving several properties.

## 7 Regulating

Years 2009/10 to 2018/2019

- Undertake property inspections on pest-prone land and advise landholders when control work is required under the Regional Pest Management Strategy
- Undertake enforcement action where landholders have failed to carry out work required under the Regional Pest Management Strategy, e.g. rabbits, nassella tussock, gorse and broom.
- Undertake surveillance of nurseries and places where plants are sold and propagated.

# LEVELS OF SERVICE



Photo: Landcare Research

## HOW ENVIRONMENT CANTERBURY'S LEVELS OF SERVICE RELATE TO THE COMMUNITY OUTCOMES

Levels of Service	Community Outcomes			
	A strong economy	Business and farming activities do not harm the environment	Environment, in general, is to be looked after	Native plants and animals can thrive
1 Controlling pest threats to production from land and biodiversity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Maintaining a capability to respond to incursions of unwanted pests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Maintaining and enhancing Canterbury's indigenous biodiversity			<input type="checkbox"/>	<input type="checkbox"/>

Environment Canterbury's contribution will be reported on each year in our annual report.

## OUR LEVELS OF SERVICE

### 1 Controlling pest threats to production from land and biodiversity

#### MEASURE 1

The number of sites with total control plants where seed is set.

#### MEASURE 2

The number of rooks.

#### TARGET FOR MEASURES 1 AND 2

See table below.

##### Targets for total control pests

		African feather grass	African love grass	Baccharis	Bur daisy	Coltsfoot	Entire marshwort	Saffron thistle	White-edged nightshade	Rooks
2006/07	Actual	None	None	None	None	None	None	None	None	14
2007/08	Actual	None	None	None	None	None	None	None	None	10
2008/09	Forecast	None	None	None	None	None	None	None	None	9
2009/10	Target	None	None	None	None	None	None	None	None	8
2010/11	Target	None	None	None	None	None	None	None	None	4
2011/12 to 2018/19	Target	None	None	None	None	None	None	None	None	0

Source: Environment Canterbury.

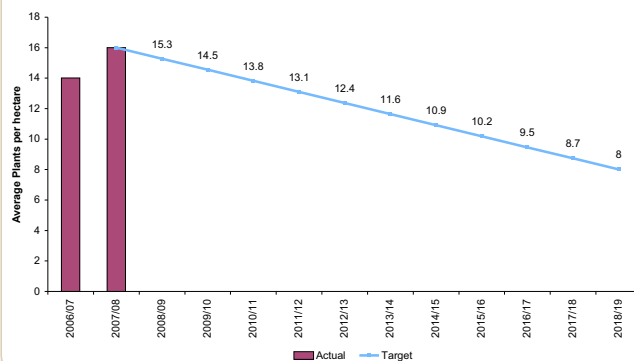
#### MEASURE 3

The average number of nassella tussock plants per hectare.

#### TARGET

A decline in the average number of nassella tussock plants per hectare.

##### Nassella Tussock



Source: Environment Canterbury.

#### MEASURE 4

The effectiveness of containment pest control programmes in keeping rabbits and wallabies below level 3 on the McLean and Guilford scales<sup>3</sup>, and preventing the area of gorse and broom from increasing.

#### TARGET

See table.

##### Targets for containment control pests

		Rabbits	Wallabies	Gorse	Broom
2006/07	Actual	100%	100%	100%	100%
2007/08	Actual	100%	100%	100%	100%
2008/09	Forecast	100%	100%	100%	100%
2009/10	Target	100%	100%	100%	100%
2010/11 to 2018/19	Target	100%	100%	100%	100%

Source: Environment Canterbury.

#### MEASURE 5

The number of new biodiversity pest<sup>4</sup> control programmes initiated annually.

#### TARGET

See table.

Note: a programme may involve one or more sites.

##### New programmes initiated annually

2007/08	Actual	5
2008/09	Forecast	2
2009/10 to 2018/19	Target	2

Source: Environment Canterbury.

#### MEASURE 6

The number of restricted<sup>5</sup> or unwanted<sup>6</sup> pests that become established.

#### TARGET

See table.

##### Number of restricted or unwanted pests becoming established

		Restricted pests	Unwanted pests
2006/07	Actual	None	None
2007/08	Actual	None	None
2008/09	Forecast	None	None
2009/10 to 2018/19	Target	None	None

Source: Environment Canterbury.

<sup>3</sup> McLean and Guilford scales:

Rabbits: The modified McLean scale has 8 levels, ranging from 1 no rabbits present, to 8 where rabbits are likely to be seen in extremely large numbers. At level 3 odd rabbits are seen; signs and some buck heaps show up, with pellet heaps spaced 10 m or more apart on average (refer to the Regional Pest Management Strategy 2005 for further information). Where rabbit levels exceed level 3 and rabbit haemorrhagic disease is likely to be effective, no formal control programme is required.

Wallabies: The Guilford Wallaby infestation scale has five levels, ranging from 1 no sign seen, to 5 with high probability of seeing wallabies. At level 3 frequent faecal and track signs are seen, but only in isolated pockets, with the likelihood of seeing some wallabies (refer to the Regional Pest Management Strategy 2005 for further information).

<sup>4</sup> Includes feral goats, possums, magpies, boneseed, wilding conifers, bell heather (refer Regional Pest Management Strategy 2005).

<sup>5</sup> Restricted pests: 32 pests identified as being potentially invasive. Some are already present in small numbers. Refer to the Canterbury Regional Pest Management 2005 Strategy for a full list.

<sup>6</sup> Unwanted pests: Organisms with potential to be invasive, but not yet present.

## ② Maintaining a capability to respond to incursions of unwanted pests

### MEASURE

Availability of a regional response capability that meets Biosecurity New Zealand's requirements.

### TARGET

Available at all times.

## ③ Maintaining and enhancing Canterbury's indigenous biodiversity

### MEASURE 1

Progress on implementing priority actions in the Regional Biodiversity Strategy where Environment Canterbury is the lead agency.

### TARGET

See table.

#### Biodiversity Strategy Actions

Actions	Results	Date
Priority Sites Identification (Action 1.1).	Sites in urgent need of protection are identified.	2009/10
Priority Sites management Plans (Action 1.2).	3 site specific plans are developed each year.	Ongoing
Review incentives and funding mechanisms (Action 1.4).	Findings are reported and implemented.	2010/11
Collate existing restoration information (Action 2.2).	Map known restoration initiatives.	2010/11
Biodiversity monitoring programme (Action 6.1).	An integrated monitoring programme.	2010/11
Knowledge development (Action 7.1).	An inventory about existing information and knowledge about biodiversity.	2010/11

Source: Environment Canterbury.

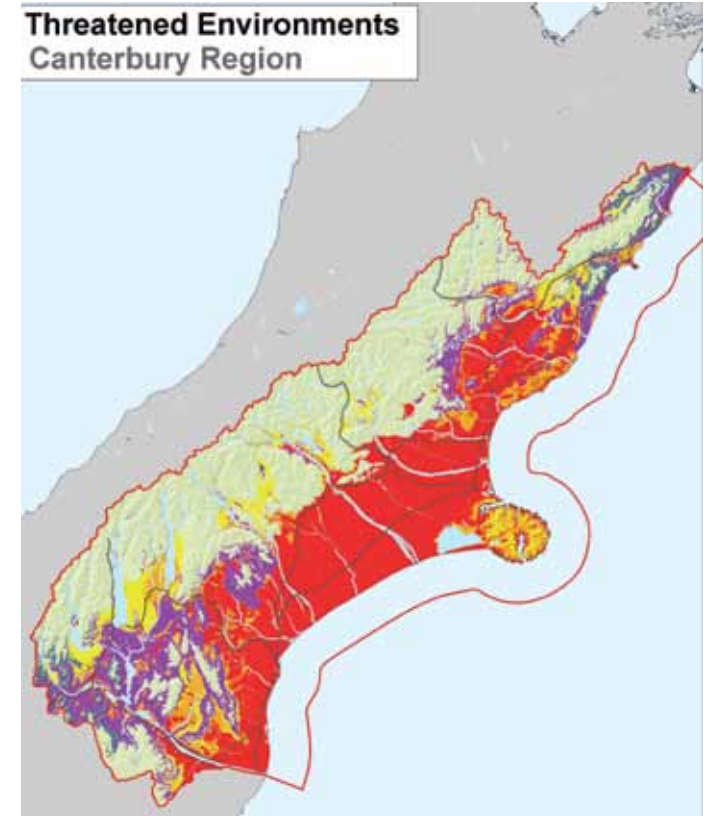
### MEASURE 2

The area of indigenous vegetation in threatened environments with 20% or less remaining (red and orange zones - see map below).

### TARGET

The area of indigenous vegetation is increasing (reported 3 yearly: 2011/12, 2014/15, 2017/18).

#### Threatened Environments Canterbury Region



#### KEY:

- less than 10% of indigenous vegetation cover
- 10% - 20% of indigenous vegetation cover
- 20% - 30% of indigenous vegetation cover
- more than 30% of indigenous vegetation cover, less than 10% is protected
- more than 30% of indigenous vegetation cover, 10% - 20% is protected
- more than 30% of indigenous vegetation cover, 20% - 30% is protected

enviroLink

Landcare Research  
Manaaki Whenua

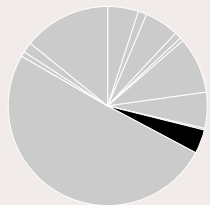
# FINANCIAL SUMMARY

## Asset management and capital expenditure

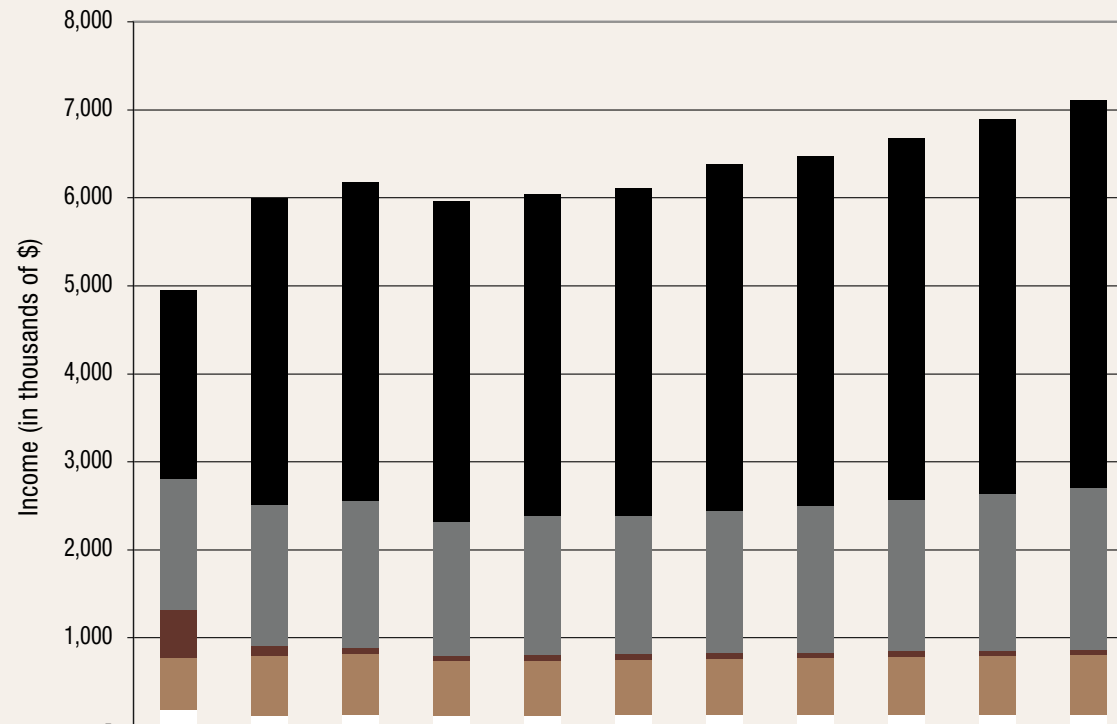
There are no assets involved in this group of activities.

## How this work is funded

For more information on source of funds and rationale for selection, see: 2009 Funding and Financial Policies, Long Term Council Community Plan Part B.



Ten years total expenditure, all 13 groups of activities  
KEY: ■ This group of activities



(\$000)	2008/09 Annual Plan	2009/10 LTCCP	2010/11 LTCCP	2011/12 LTCCP	2012/13 LTCCP	2013/14 LTCCP	2014/15 LTCCP	2015/16 LTCCP	2016/17 LTCCP	2017/18 LTCCP	2018/19 LTCCP
Interest	184	105	120	120	121	121	121	121	121	121	121
User Pays/Other	593	690	704	615	625	635	644	655	666	678	690
Grants	543	116	61	61	61	61	61	61	61	61	61
Targeted Rates	1,493	1,595	1,668	1,523	1,573	1,570	1,621	1,668	1,724	1,781	1,841
General Rates	2,138	3,487	3,622	3,636	3,659	3,726	3,938	3,974	4,114	4,255	4,403
<b>Total Income</b>	<b>4,951</b>	<b>5,993</b>	<b>6,175</b>	<b>5,955</b>	<b>6,039</b>	<b>6,113</b>	<b>6,385</b>	<b>6,479</b>	<b>6,686</b>	<b>6,896</b>	<b>7,116</b>
Operating Expenditure	5,319	6,250	6,175	5,955	6,039	6,113	6,385	6,479	6,686	6,896	7,116
Operating Surplus/(Deficit)	(368)	(257)	-	-	-	-	-	-	-	-	-
Reserves	368	257	-	-	-	-	-	-	-	-	-

# Rating for Bovine Tb control

## What the Council decided

### THE DRAFT 2009-19 LONG TERM COUNCIL COMMUNITY PLAN PROPOSED:

- That the contribution by Environment Canterbury targeted ratepayers for the local share of the national bovine Tb control programme is reduced by 50%, or approximately \$250,000. Note the central Government share would therefore also reduce by the same amount.
- Over time, shifting the targeted rate funding from a contribution to the Animal Health Board (AHB), and replacing this with a regional pest operation, would maintain the gains from the national programme and ensure benefits to biodiversity are not lost.

### BACKGROUND TO THE PROPOSAL

The national bovine Tb control programme controls possums and other vectors of bovine Tb. In the past, Environment Canterbury ratepayers have contributed approximately 10% of the cost of running the programme in Canterbury (the local share), mainly via targeted rates on affected properties (in 2008/09 this was \$449,000). The balance of funding for this programme has come from central government via the AHB. Previously Environment Canterbury has administered the bovine Tb control programme in Canterbury on behalf of the AHB. A change in the way this programme is run has resulted in this function being taken over by the AHB.

### COUNCIL'S DECISION

Funding for the bovine Tb control programme in Canterbury will be reinstated to approximately 10% for the next two years. This will allow time to review the National Pest Management Strategy, due in 2009.

### WHAT THE SUBMITTERS TOLD US

Seventy two submitters indicated a willingness to pay the existing 10% contribution to the programme, with many saying that cutting back the programme at this stage would result in a loss of gains made in recent years. They also suggested that it would be better to channel the funds directly to the AHB rather than to a regional pest operation.