

Land

Environment Canterbury's role is as the lead agency for soil conservation and a joint lead agency, in collaboration with landholders, industry groups, territorial authorities and other agencies, for managing land resources



What we achieved this year

Within the land portfolio we contribute towards achievement of seven community outcomes:

Our contribution

- This year Environment Canterbury has helped to enhance regional environmental well-being by continuing to promote sustainable land management practices to individual farmers and to the farming industry.
- Grants have been made for on-the-ground protection works at high priority indigenous biodiversity sites throughout Canterbury – as part of Environment Canterbury's commitment to the Regional Biodiversity Strategy.
- We contributed funding and encouraged actions to protect and improve indigenous biodiversity on private and public land.
- We progressed the Greater Christchurch Urban Development Strategy in partnership with other agencies. The strategy ensures that Christchurch's current and proposed land-use patterns are aligned with community outcomes.
- In the Waimakariri Regional Park, we made improvements to the Kaiapoi Island trail bike park and added a 5 km extension to the mountain bike tracks at McLeans Forest. We also put in 12 picnic settings, planted 2,500 New Zealand seedlings in the Poynter Nature Reserve and completed planning for the Templars Island section of the Park.
- The 2,200 ha Waimakariri forest continues to provide flood control, wood and recreation benefits with 60 ha of new planting and 16,000 tonnes of logs sold to local and export markets.
- In 2008/09, 345 resource consents were issued, with conditions, for activities on land. Conditions monitored for compliance totalled 4,440. Action was taken in the 103 cases where significant non-compliance with consent conditions was found.

Community outcome

- The environment, in general, is to be looked after**
- Air, beaches and ocean and land are all in a healthy condition**
- Native plants and animals can thrive**
- Rural land is mainly for farming and horticulture**
- Recreational needs are met**
- Business and farming activities do not harm the environment**
- Water is in a healthy condition, clean and plentiful enough to support life**

In this portfolio we report on five levels of service to illustrate our achievements this year.

Effect on the four well-beings



Healthy land, clean water and maintaining the productivity of soils increases economic, environmental and social well-being. Economic and environmental well-being is enhanced through maintaining soil quality and quantity, and through improving land management practices. Allowing responsible use of land resources is essential for social and economic well-being. Social and cultural well-being is enhanced through provision of recreational opportunities at regional parks. Co-ordinating urban development in the greater Christchurch metropolitan area has benefits for economic, environmental, social and cultural well-being. The cost of complying with consent conditions could negatively affect the economic well-being of some people, but this is offset by wider benefits to environmental well-being.

Other key achievements this year

- A change to the Regional Policy Statement (RPS) was prepared and notified as part of Environment Canterbury's action commitments under the Greater Christchurch Urban Development Strategy. The 20-week hearing started in June, and is scheduled to finish in September.
- Officer Reports on submissions to RPS Proposed Change 1 (Development of Greater Christchurch) were sent to submitters and the Hearing Panel. This was a collaborative effort with contributions from Environment Canterbury, Christchurch City Council, Selwyn District Council, Waimakariri District Council and the NZ Transport Agency, consultants and legal counsel.
- We recognised commitment to improving indigenous biodiversity by awarding \$400,000 to individuals and community groups for 53 biodiversity projects and through the Environment Enhancement Fund. Examples include \$50,000 towards the cost of a predator-proof fence for the protection of New Zealand's only colony of the nationally endangered Hutton's Shearwater/titi near Kaikoura, over \$70,000 towards QE II covenants for weed control and wetlands enhancement at ten sites across Canterbury, and over \$25,000 for conservation work around Wainono Lagoon. An additional \$40,946 was allocated from the Honda Treefund to a further 16 projects.
- We supported the Ballance Farm Environment Awards, recognising nine categories of sustainable farming practices. The supreme winner for 2009 was a cropping farmer from Temuka in South Canterbury.
- We prepared the Management Plan for the new Lake Tekapo Regional Park and information signage was installed in time for the summer holidays, to guide the public on the use and layout of the park. These signs are a key part of "establishing" the park.
- Policies for the Management of Environment Canterbury Lands were produced to guide the effective management of Environment Canterbury-administered land.
- The Regional Biodiversity Co-ordinator started work, and the Canterbury Biodiversity website was launched. The website (www.canterburybiodiversity.org.nz) and a regular newsletter provide information on biodiversity and a wide range of biodiversity projects.
- A working soil quality prediction model was released to stakeholders (the Land Management Index).
- We derived a rural land-use map for the region that incorporated time-series satellite images, for use in the integrated aquifer model that a group of Crown Research Institutes are developing.
- We monitored the spread of wilding conifers in the Waimakariri and Opihi-Orari-Opuha catchments and maintained the database of wilding conifer control works that have been carried out in the region.
- Following a significant enforcement action relating to illegally buried foundry waste in North Canterbury, a project was set up to liaise with representatives of the metal casting industry. As a result of this, all foundries in Canterbury were given an environmental best practice audit. In addition, a process has been established with the help of the industry, to correctly dispose of the foundry sand waste.
- Coastal wetlands were surveyed and mapped in a GIS database to better understand their boundaries and provide a benchmark to measure their decline or increase in the future.
- We continued to establish sites to study long-term changes in soil depth and reassessed a previous site. We continued to reassess long-term soil quality monitoring sites representing a range of land uses and soil types on the Canterbury Plains and downlands. We measured post-burn soil quality on three sites of high-country land subject to land management fires. Soil is a key natural resource for Canterbury and it is important to understand trends in the amount and quality.
- We monitored hill and high country vegetation cover and bare land, using field sites, particularly in South Canterbury. Satellite images were analysed for changes in vegetation cover on Banks Peninsula (1990-2007). Vegetation cover is a key indicator for biodiversity and land-use management.
- We participated in a collaborative trial with the Canterbury Waste joint committee and Transpacific Industries to investigate the effects of compost from municipal green-waste on crop productivity and soil quality.
- We participated in an advisory group for the development of Meat and Wool New Zealand's farmer-driven Land and Environment Plans.
- We lodged submissions on 28 notified city/district plan changes to ensure consistency with regional policies and 23 resource consent applications notified by city/district councils to address land-related issues.

Levels of service

This section reports on performance for 2008/09 against Annual Plan targets.

1. Maintaining and improving soil quality and quantity

Measure 1

The average annual rate of soil loss from wind erosion.

Target 2008/09

Less than 0.25 mm a year by 2030.

The first remeasurement of a benchmark site showed no significant change in soil depth from 2002 to 2008. Other sites will be remeasured in 2009/10.

Measure 2

The percentage of the area of non-arable farmland with more than 20% bare ground.

Target 2008/09

The percentage is reducing.

Satellite images of land coverage were purchased to allow the analysis for this measure to be undertaken in 2009/10.

Measure 3

The percentage change in soil quality factors including organic carbon, aggregate stability, readily available nitrogen and fertility.

Target 2008/09

Soil quality is being maintained or improved. (Thresholds are still being developed in association with the National Soil and Land Use Research Initiative.)

Monitoring completed in the 2007/08 year indicated a general increase in bulk density, a small general decline in total carbon, and a decline in cadmium concentrations¹. The report and further monitoring will be used for State of Environment reporting in 2012.

¹ Sampling was from 30 paddocks on Claremont and Lismore soils.

Measure 4

The percentage of areas with identified soil quality and quantity issue that are being addressed by resource care, community or industry groups.

Target 2008/09

100%.

Achieved.

2. Protecting key infrastructure¹ from the impact of settlement

Measure

The extent to which the efficient operation, use and development of key infrastructure is impacted by settlement, other than through a Resource Management Act process, where the extent of impact is known, and acknowledged.

Target 2008/09

No impact.

Achieved.

¹ The RPS defines key infrastructure as: roading, the Christchurch International Airport, Timaru Airport, Port of Lyttelton, Primeport Timaru, telecommunication facilities, military establishments, the rail network, and other network utilities (including electricity transmission and distribution).

3. Providing open space leisure opportunities on council-owned land

Measure

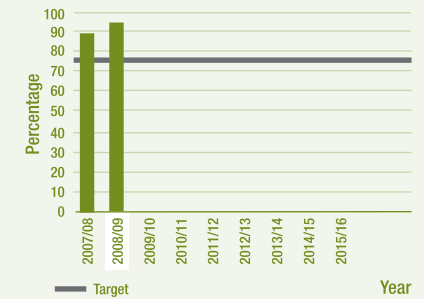
The level of visitor satisfaction.

Target 2008/09

75%.

Achieved (94%).

Level of visitor satisfaction



Waimakariri River Regional Park



4. Authorising resource users to use natural and physical resources so that the environmental effects remain acceptable to the community

Measure 1

The percentage of resource consent applications processed in compliance with the statutory timeframes set down in the Resource Management Act 1991.

Target 2008/09
90%.

345 applications were processed. High demand for consents from water, dairy and property development-related activities, coupled with increased numbers of notifications and hearings required in water resource constrained areas, and for some large individual applications, has resulted in many consent applications across all portfolios not being able to be completed within statutory timeframes. Difficulties in recruiting staff have compounded this problem. Recent process improvements, coupled with reductions in demand for consents and improvements in recruitment, are starting to show significant improvements in timeframe performance.

Not achieved (43%).

Processing of applications



Source: Environment Canterbury's Resource Management Act Database.

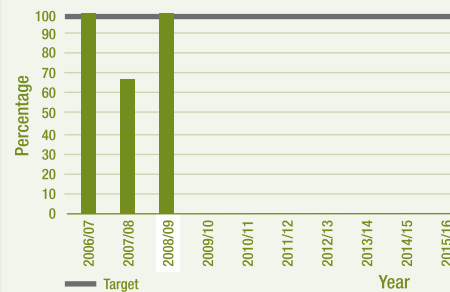
Measure 2

The percentage of resource consents consistent with Resource Management Act 1991 requirements, including proposed and operative regional plan requirements.

Target 2008/09
100%.

Achieved.

Consents consistent with RMA



Source: External audit of sample of issued consents.

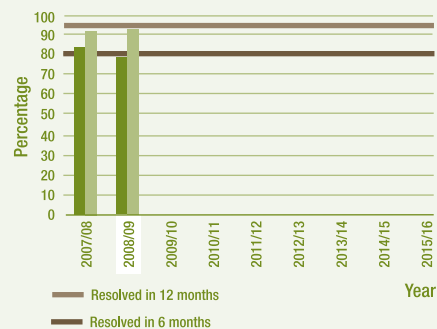
Measure 3

The percentage of significant or major non-compliance¹ with resource consent conditions resolved (no further action is required).

Target 2008/09
80% are resolved in six months.
95% are resolved in 12 months.

79% of non-compliances were resolved in six months. 91% of non-compliances were resolved in 12 months. *Not achieved.*

Consent conditions – non-compliance resolved



¹ Significant non-compliance means there have been moderate, serious or persistent adverse environmental effects. This also includes repeated minor non-compliance with nil or short-term adverse environmental effects, and unauthorised activities.

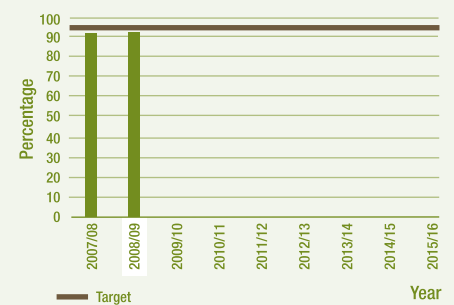
Measure 4

The percentage of environmental incidents resolved (no further action is required).

Target 2008/09
95%.

The result is close to target (94%) and represents 417 resolved incidents. *Not achieved.*

Incidents resolved



5. Ensuring cattle, farmed deer and pigs are excluded from specific rivers and lakes

Measure 1

The percentage of Living Streams catchments (listed below) with agreed programmes of action to exclude cattle and farmed deer and pigs from at least 80% of the length of rivers and lakes in those catchments within five years of implementing the programme.

Target 2008/09

100%.

All Living Streams have agreed plans of action. All include a focus on keeping large animals out of waterways.

Achieved.

Measure 2

The number of Living Streams catchments where cattle and farmed deer and pigs have been excluded from at least 80% of the length of the rivers and lakes in those catchments.

Target 2008/09

Two catchments.

Cattle and farmed deer and pigs have been excluded from at least 80% of the length of the rivers and lakes in the following catchments: Cam River, Boundary Drain, Rhodes/Petrie Stream. These are in addition to the 11 catchments listed in the 2007/08 Annual Report.

Achieved.

Living Streams catchments: Ohapi Creek, Cam River - including North, Middle and South Brooks, Lyell Creek, Waikakahi Stream, Smithfield, Waikuku Stream, Little Ashley, Taranaki Creek, Silverstream, Boggy Creek, Harts Creek/Birdlings Brook, Middle Creek, Raukapuka, Worners, Saltwater Creek, Boundary Drain, Coopers Lagoon, Waikewai, Cashmere Stream, Staveley Stream, Okuti and Okana, Wainui, Wairepo and Willowburn, Orakipaoa, Taumatukahū, Dobbies Creek, Jollies Brook, Coopers Creek, Ohoka Stream, Kaiapoi Stream, Rhodes/Petrie Stream, Cust Main Drain, Courtenay/Kakanui, Whitney Creek, Carters Creek, Pahau, Halswell River, Waihao/Wainono tributaries, L1 and L11 drains..

Financial summary

\$000	Actual 2008/09	Budget 2008/09	Actual 2007/08
Total Expenditure	8,751	8,009	7,535
<i>Funded by:</i>			
General rates	4,565	4,564	4,250
Targeted rates	855	835	899
Grants	120	55	-
User pays and other	2,334	2,622	1,817
Total Funding	7,874	8,076	6,966
Reserves Increase/(Decrease)	(877)	67	(569)

Additional activity has been undertaken to progress the Urban Development Strategy faster than anticipated with additional costs for the judicial review and declaratory judgement. There has also been increased cost associated with enforcement activity, with some major cases including one concerning illegally buried foundry waste which resulted in a region-wide environmental best practice audit.

Capital expenditure

Refer to Appendix 1, page 96, for more information on capital expenditure associated with this activity. Capital expenditure associated with this group of activities was funded from general funds and included as depreciation expense.