



Dame Margaret Bazley and George Tikao of Onuku Marae at Ngāti Moki Marae, Taumutu; Mark Solomon at right.

Partners commit to restoration of Te Waihora/Lake Ellesmere

The restoration and rejuvenation of the mauri and ecosystem health of Te Waihora/Lake Ellesmere has been confirmed with the signing of Whakaora Te Waihora – a long-term relationship agreement and shared commitment between Environment Canterbury, Ngāi Tahu and Te Waihora Management Board.

The parties have also signed an interim co-governance agreement which establishes an enduring co-governance framework for the management of Te Waihora and its catchment.

These agreements signal the start of a new approach to management of natural resources in the region, one which acknowledges and brings together the tikanga responsibilities of Ngāi Tahu and the statutory responsibilities of Environment Canterbury.

Te Rūnanga o Ngāi Tahu Kaiwhakahaere Mark Solomon says the agreement goes beyond the Settlement, continues the process of healing and enters a new age of collaboration.

“Te Waihora was once a considerable tribal resource known as Te Kete Ika o Rākaihautū - The Fish Basket of Rākaihautū, which has declined. It is going to take considerable time, effort and resource to restore and rejuvenate the many values of Te Waihora.”

Environment Canterbury Chair of Commissioners Dame Margaret Bazley says the agreement with Ngāi Tahu marked an important milestone in the life of Environment Canterbury.

“It is also significant for the region of Canterbury, and indeed New Zealand. We are forging a way in which iwi and regional government can work together for common goals.”

Dame Margaret says it was important everyone with an interest in the lake and catchment worked together. “This is the premise on which the Canterbury Water Management Strategy is based and it is only by bringing the whole community with us that this initiative will be successful.”

\$11.6 million clean-up fund established

A fund to clean up Te Waihora has been established. The total \$11.6 million is made up of contributions of \$6.1 million from the Government, \$3.5 million from Environment Canterbury, \$1.3 million from Fonterra, \$500,000 from Ngāi Tahu and the balance from the Selwyn District Council, Waihora Ellesmere Trust and Lincoln University. There will also be a substantial commitment to the clean-up from local volunteers.

Announcing the government’s contribution in August, Environment Minister Nick Smith said: “This is the most significant fresh water clean-up project New Zealand has undertaken because of the severity of the pollution and the size of the lake. It has taken 50 years for it to get into this mess and it will take a long-term commitment to put it right. Ngāi Tahu, farmers, community representatives, local, regional and central government, as well as New Zealand’s largest company Fonterra, are committed to working together to drive the changes needed to reduce pollutants entering the lake and put it on the road to recovery.”

Progress with water management in Canterbury highlighted

The progress being made around water management throughout Canterbury has been highlighted through a series of talks to Christchurch groups being undertaken by Environment Canterbury commissioners.

Chair of commissioners, Dame Margaret Bazley, says the talks outline the substantial gains being made through community engagement with the Canterbury Water Management Strategy.

“Much of our work to date has been in rural areas where water management committees have been working on plans to manage the water issues in their areas, with the support of Environment Canterbury and the local district council.

“Through our recent talks, Christchurch people have been very interested to hear the amount of work going on, the complexity of what we are dealing with, and the importance of this work for the people of Christchurch and Canterbury.

“We were appointed by the Government to improve water management in Canterbury and we have made some very satisfying progress in the past 16 months.”

She says that successfully implementing the Canterbury Water Management Strategy, which was underway when they were appointed, was key to delivering integrated and sustainable water management. “We have been working very hard to ensure there is continued progress.”

“Canterbury is already an agricultural powerhouse but there is significant potential to continue to develop water resources for economic and social benefit, while at the same time achieving the environmental and cultural goals in the Strategy.”

If you are a member of a group that would like a presentation on water from an Environment Canterbury Commissioner or staff member, please email Robyn.Pay@ecan.govt.nz



Welcoming the wrybill

August has seen the return of one of Canterbury’s best known but most threatened birds, the wrybill/ngutu parore, which breeds and feeds on bare shingle riverbeds.

The wrybill is a small bird with grey plumage on its back, whitish below and with a black band on its chest that gives it great camouflage. There are only around 5000 wrybill left. It’s the only bird in the world with its bill bent to one side, giving it its name and allowing it to forage under riverbed stones.

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Between August and January, wrybill nest on riverbed shingle in Canterbury's rivers. Unlike other riverbed birds,

they don't build a nest from sticks, but make a small scrape in the stones and line it with pebbles. Their eggs are also grey, looking just like the stones that surround them. It's perfect to hide them from predators, but it also means that we have a hard time seeing and avoiding them.

If you're out in a riverbed, watch your step over the stones! If possible, keep vehicles to the berms of the river or in another vehicle's tracks, and follow all signs.



One good tern deserves another

Each year Environment Canterbury runs a control operation to target animal predators in two sections of the Ashburton River/Hakatere, aiming to help the populations of two rare bird species, the wrybill and the black fronted tern.

Now in its ninth year, this season's control operation began in September. Environment Canterbury's Southern Biosecurity Team Leader, Brent Glentworth, is optimistic about the outcome, but says it's not a quick fix. "It takes many years to allow breeding birds to boost numbers naturally and encourage other birds back into area where they have been largely absent. But bird survey results have been encouraging, and ultimately all birds, invertebrates and lizards in the Ashburton riverbed will benefit from our work."

A rivercare group is also being formed to look after wrybill and other rare and endangered riverbed birds on the Waimakariri. If you would like to be part of this group please contact Mimouk Hannan on 03 323 5269 or mimouk.hannan@ecan.govt.nz.

Metro update: central city interchange



The new Christchurch central city bus interchange opens on Tuesday, October 25, replacing the temporary exchanges on Hagley and Bealey Aves.

Known as Central Station, it will be on Lichfield St, next to the old Kathmandu shop site between Durham and Colombo Streets. For people who have had to split their journey after the February quake, taking the shuttle between each terminus, the new interchange will enable you to cross town on one or at most two buses.

Further improvements to bus routes and services are planned for late October, early November.

Keep an eye on the metroinfo.co.nz website or Metroinfo Facebook pages for updates.

New Clean Heat programme for Ashburton

Ashburton District Council and Environment Canterbury have combined forces to help the community work towards cleaner air for the town. The programme aims to raise awareness of the town's winter air pollution problem and the effect it has on health, Ashburton District Council Regulatory Manager Richard Wade says "We are encouraging people to switch to cleaner forms of heating and to improve the ways they operate their solid fuel appliances.

"There's no doubt Ashburton has an issue with air quality in winter," Mr Wade says. "Figures show that during winter we are regularly exceeding the levels set by the government's National Environment Standard for Air Quality. "There's also substantial evidence that breathing the fine particulate matter which comes

from solid fuel burners is harmful to human health, particularly for children and the elderly. Effects on health include respiratory and circulatory problems. "We want to reduce this risk by encouraging people who live in Ashburton township to convert to cleaner heating appliances and to take advantage of the subsidies offered by EECA Warm Up New Zealand: Heat Smart subsidies before they end on 30 June 2013."

The programme aims to spread the clean air message, to provide information on good burning practices and to advise residents about the funding available for replacement clean heating and insulation.

For more information about cleaner ways to heat your home, visit www.cleanheatashburton.org.nz

Tracking high pollution nights in Christchurch

The number of high pollution nights in Christchurch linked to home heating this winter has not increased, despite the hardships caused by damage to houses and heating caused by the earthquakes.

Although the city recorded 28 high air pollution days over the winter, 16 were due to dust from earthquake silt and damaged roads. Some dust also came from grit spread on roads during the snow events.

The remaining 12 high pollution days were caused by smoke from home chimneys, and this is on a par with the levels of the last few years. It maintains a slow downward trend (from more than 50 nights 10 years ago), as awareness of the health effects of pollution continues to grow, and people switch to cleaner and more efficient forms of home heating.



Protecting braided rivers and green corridors

Work to remove weeds from the fairway of the Conway River to help maintain the river's natural braided character has been undertaken with support from Environment Canterbury's Immediate Steps Programme.

Maintaining the character of Canterbury's unique braided rivers is internationally significant work, says Environment Canterbury's Jo Abbott.

"While the majority of the world's braided rivers have been heavily modified by human development, New Zealand is home to the majority of unmodified braided rivers in the southern hemisphere.

"Maintaining the natural character of these rivers and the unique ecosystems they exhibit is therefore internationally important," she says.

The Hurunui-Waiapu water management zone committee selected the project to receive \$12,000 funding. It has \$100,000 to invest each year for five years.

Elsewhere in Canterbury, the Waimakariri Water Management Zone Committee granted Immediate Steps funds to enhance the green corridor along the

Waimakariri River at Poynter Nature Reserve.

Environment Canterbury's Mimouk Hannan says that the funding helped to create a healthy wetland for native birds, fish, and invertebrates, in addition to thriving riparian and wetland vegetation.

"The project has allowed for vital weed control and restoration work to be done at the confluence of the Waimakariri and Kaiapoi rivers. It builds on work that Environment Canterbury has been doing in the Reserve for around 20 years."

The five year \$10 million 'Immediate Steps' biodiversity protection and restoration programme was launched in 2010. It is an integral part of the Canterbury Water Management Strategy. Through Immediate Steps, \$2 million each year is available for protecting and restoring biodiversity in and around freshwater habitats. Of this two thirds comes from Environment Canterbury rates and one third comes from land owner contributions.

Christchurch waterway ecology and health investigated following earthquake

Since February's earthquake, changes in the ecology and health of the Avon/Ōtākaro and Heathcote/Ōpawaho rivers and Estuary/Ihutai have been monitored to help understand and respond to the effects of the quakes on the natural environment.

As a result of monitoring by Environment Canterbury and Christchurch City Council, in late September the Canterbury District Health Board lifted the health warning about contact with water on Christchurch beaches. Warnings for the estuary and the Avon/Ōtākaro and Heathcote/Ōpawaho rivers remain in place. At Scarborough beach there is also currently a problem with a broken sewer, but repair work is underway.

The estuary was affected by mounds caused by liquefaction, and the southern part of the estuary is now shallower than it was. The discharge of sewage, trade waste and

sediment-laden storm-water into waterways has affected the local ecology including vegetation, fish, invertebrates and micro-organisms.

Bacteria levels in shellfish also increased dramatically after the February earthquake, reaching almost twice as high as any previous record. Shellfish from the estuary should not be gathered or eaten.

Remember that heavy rain washes sewage pollution into the sea, so you should avoid the beaches for two days after heavy rainfall. Signs posted along the beachfronts will let you know the state of the water, but you can also get information on water quality at www.ecan.govt.nz/eq-effects-water

Milestone in water management

October 1 was a milestone for water management in Canterbury.

It marked the end of moratoria on consents for the Hurunui and Waiau rivers in North Canterbury. On the same date, the proposed Hurunui-Waiiau Regional Plan was notified by Environment Canterbury.

Environment Canterbury imposed the moratoria (a ban on consent applications) last year to allow time to work through water management issues and get better alignment of a number of overlapping council planning processes.

A key outcome of the moratoria was the delivery in August this year of a zone implementation programme (ZIP) by the local water management committee in the Hurunui-Waiiau zone.

The Hurunui-Waiiau ZIP – the first of 11 being worked on as part of the Canterbury Water Management Strategy – provides 66 recommendations on water management to Environment Canterbury and the Hurunui District Council.

For more information see www.ecan.govt.nz

All zone committees up and running

The final two of the 10 Canterbury zone committees have now formed. The Banks Peninsula Zone Committee met for the first time on September 23 and the Christchurch-West Melton Zone Committee was launched on October 7.

Zone committees in other areas – Kaikoura, Orari-Opihi-Pareora, and Upper Waitaki – are receiving and reviewing information and talking with stakeholders as they work to set water management priorities for their zones and develop their Zone Implementation Plans (ZIPs).

The zone committees for Ashburton and Waimakariri have released their draft ZIPs and are seeking community input by October 21. Both ZIPs contain recommended actions, responsibilities and timeframes to provide integrated water management solutions acceptable to the community.

The draft ZIPs and online feedback forms can be viewed at www.ecan.govt.nz/canterburywater



Water work is ZIPping along

Water is a major issue not only in New Zealand but around the world. Communities are looking for a balance between the competing uses for water, as well as wanting to protect the quality and amount of water available.

In Canterbury we are fortunate to have the collaborative and community-led Canterbury Water Management Strategy, which aims to balance the demand for water within an environmentally sustainable framework.

Under the Strategy, Canterbury has been divided into 10 water management zones. A committee including local representatives has been appointed to each zone to develop local and community-led solutions to water issues. Each zone committee is developing a zone implementation plan (ZIP). There is also a Regional Committee to cover issues across the whole of Canterbury.

Committee members are talking to people in their zones as well as to a wide range of stakeholders about what matters in water management. The recommendations are expected to reflect a broad community consensus on how to manage water in a balanced and integrated way.

New rules for stock around natural waterways

New rules have been introduced to control stock access to natural waterways around Canterbury. Additional rules to completely exclude stock from waterways come into force in June next year.

As a result farmers are being encouraged to plan how they will manage stock to comply with new rules which were introduced in the Natural Resources Regional Plan (NRRP) which became operative on June 11.

Stock are excluded from waterways under the NRRP if there are significant adverse effects. Such effects include heavy pugging of the bed or banks of waterways; visible discoloration of water; an increase in bacteria levels; or any obvious evidence of faecal matter in waterways.

The new rules also restrict stock access to rivers or lakes near a river bathing site or within 1km of a community drinking water supply. Salmon and inanga spawning sites are also protected, as are a number of specified locations on spring-fed rivers on the Canterbury Plains.

From June next year intensively farmed stock – which includes farmed pigs and dairy cattle – will be prohibited from entering natural waterways.

For more information on the new rules visit www.ecan.govt.nz/nrrp or call Customer Services on 0800 324 636.



Winter grazing warning: keep away from waterways

It's common practice in Canterbury for farmers running less intensive farms to take extra stock for mob-grazing over the winter.

From June next year, stock strip-grazed on winter crops (such as kale) will be prohibited from entering natural waterways.

Farmers who take on extra stock for mob-grazing over the winter will need to be extra vigilant to ensure they will comply with the new rules.

Environment Canterbury's preferred approach is to work with farmers, suppliers, industry groups, and the local water management committee to ensure there is a good understanding of what needs to be done to protect the environment.

In a recent example at Albury, near Timaru, a member of the public complained to Environment Canterbury about cattle in a natural waterway.

An Environment Canterbury resource management officer and the chair of the Orari-Opihi-Pareora water management zone committee met with the farmers and a free farm audit was also completed by a local consultant. The low-intensity farm was being used for mob-grazing over the winter and will require significant work to fully comply with the exclusion rules when they come into force in June next year.

Temporary fencing was put in place to control the cattle and comply with the rules. Over the next few years the property owner is planning to build permanent fences to exclude stock from more than 50 natural waterways.

One of three groups at the Canterbury Plantout, Selwyn Delta.



Thousands of native plants for Canterbury Plains

In early September more than 4,000 native plants found new homes across 15 sites on the Canterbury Plains as part of the 2011 Canterbury Plantout.

The vision of the Plantout is to improve biodiversity across the Canterbury Plains by creating a network of green patches and corridors for native wildlife from the mountains to the sea. Canterbury has one of the lowest levels of remaining native vegetation of anywhere in New Zealand – less than 1% – of which most is acutely threatened.

The Plantout was run jointly by Te Ara Kākāriki Greenway Canterbury, Environment Canterbury, Ngāi Tahu, Department of Conservation, Selwyn District Council, Conservation Volunteers New Zealand and the Waihora Ellesmere Trust.



Good practice showcase for farm environment award winners

An open day on the farm of the overall winners of last year's Canterbury Ballance Farm Environment Awards will allow visitors to learn more about what makes Eric and Maxine Watson's farm a winner. Environment Canterbury is the regional partner for the annual awards.

Everyone is welcome to the day which includes a farm tour and afternoon barbecue. Topics to be covered include:

- The good soil; maximising production while protecting your greatest asset
- Getting bang out of your fertiliser buck
- Ways with water - variable rate irrigation, taking water use efficiency to a new level.

Speakers include Environment Canterbury, the Foundation for Arable Research, PGG Wrightson, Massey University, the Lauriston Farm Improvement Group, Landcare Research and Plant & Food Research.

Date: 21 October 2011 rain or shine.

Venue: Rangitata Holdings Ltd, 441 River Road, Wakanui, Ashburton

Enter the 2012 awards now

The 2012 Canterbury Ballance Farm Environment Awards are now open for entries.

The awards recognise and celebrate New Zealand farmers who are working towards economically and environmentally sustainable land and water management and business practices. Entries close on 24 October 2011.

To enter, nominate someone or find out more, visit www.bfea.org.nz, contact the Regional Coordinator on (03) 314 8152 or email bfea@ecan.govt.nz

NEWS IN BRIEF

All change from Kilmore St

A reminder that following the February earthquake, Environment Canterbury's main office address is 24 Edward Street, Lincoln.

Postal enquiries can be sent to:

Environment Canterbury, PO Box 345, Christchurch 8140.

Our main switchboard number is 03 365 3828 or freephone 0800 EC INFO (0800 324 636).

On the road

We have a display at both the Ashburton A&P Show, 28-29 October 2011, Ashburton Showgrounds, and at the Canterbury Marine Festival, 29-30 October 2011, Lake Hood. **See you there!**

Take the bus next time!

Metro is a great alternative to sitting in traffic. Once on the bus you can read, check your cellphone, listen to your ipod, enjoy the journey and arrive relaxed.

For timetables, go to www.metroinfo.co.nz or speak to our wonderful Metroinfo staff - 366 88 55.



School science and technology winners – the earthquakes dominate Christchurch entries

Recent seismic events prompted many Christchurch schoolchildren to explore earthquake-related questions at this year's Science and Technology Fair.

Students tested varying ratios of silt and soil to see which grew the best lettuces and grass, mixed silt with concrete to make pavers, found there was more zinc in Woolston silt than in Dallington silt, and designed earthquake-safe bridges and buildings.

Winners of Environment Canterbury's Resource Management Award categories were presented in Timaru by Commissioner Tom Lambie and in Christchurch by Commissioner David Caygill.

Winners of Environment Canterbury's Resource Management Award

Science and Technology Fair, Christchurch

Senior

Heather Neill: designed a possum trap to protect curious native weka from being poisoned.	Year 10, Lincoln High
Finn Lee: designed an exhaust filter for his motorbike out of an old can.	Year 9, Lincoln High

Junior/intermediate category

1 st Johan Esterhuizen: made a dry cell hydrogen generator to improve a car's fuel efficiency.	Year 9, home schooled
2 nd Dinuki Karunasekera: tested fertiliser combinations to find which was most environmentally friendly.	Year 8, Cobham Intermediate
3 rd Sophie Lee: tested dairy cow, beef cattle and sheep poo for acidity/alkalinity and environment effects.	Year 8, Kirkwood Intermediate

Sanford Science and Technology Fair, Timaru

Senior

1 st Bronte Davenport: conserving or capturing water from household roofs.	Craighead Diocesan School
2 nd Tessa Adolph: aimed to reduce the number of plastic bags people use.	Craighead Diocesan School
3 rd Andrew Tiffen: automatic re-setting rat trap.	Ashburton College

Junior

1 st Blair Smith: designed an elastic replacement for tape used on rugby boots and trialled it throughout the season.	St Joseph's
2 nd Emma Kelly and Micaela Cooper: designed more colourful and tailored reflective safety jackets for school.	St Joseph's
3 rd Amanda Knipe: found that a town the size of Timaru generates enough advertising in letterboxes to use up 600 pine trees per month.	Grantlea Downs School

Overall winner makes it a double

Environment Canterbury's Wrybill Trophy is the supreme award given to the most outstanding Year 7-13 student(s) for the Resource Management section of the Canterbury Science and Technology fairs in Christchurch and Timaru. This year's winner is Bronte Davenport from Craighead Diocesan School, Timaru - who also won in 2008. Here she receives her award from Dame Margaret Bazley, with judge Dr Jon Hickford.

Some of the other winners...



Tom Lambie, Debbie Eddington and Blair Smith

David Caygill and Heather Neill



Emma Kelly and Micaela Cooper

Dinuki Karunasekera

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