

Annual Report for the Community 2015

Working with the community to improve freshwater

The Regional Committee was established in 2010 as a sub-committee of Environment Canterbury to:

- Monitor the implementation of the CWMS across the Canterbury Region
- Provide advice to Environment Canterbury on regional issues associated with implementation of the CWMS.

The membership reflects these functions – there are representatives of the Regional Council (2), Christchurch City Council (1), District Councils (3), Te Rūnanga o Ngāi Tahu (1) Ngāi Tahu Rūnanga (3), the wider community (6), and one from each zone of Canterbury's ten committees. There are also central government observers from each of MPI and MfE, and an observer from the Canterbury District Health Board.

The committee published its Regional Implementation Programme in 2012, and then continued to structure its ongoing work programme around:

- Infrastructure development requiring significant investment and/or involving wider regional stakeholder involvement
- Regional biodiversity
- A co-ordinated approach to land use and water quality.

Kaitiakitanga is woven through these three areas, and recreation and amenity has emerged as an additional work stream. In addition the committee has been asked for specific advice on the 2011 changes to the Rakaia Water Conservation Order, reporting progress reporting progress against CWMS Targets, and how to support the delivery of environmentally beneficial infrastructure projects.



Key achievements 2010-2015

- Facilitating the sharing of freshwater information across the region
- Providing funding for biodiversity projects of regional significance in Lake Ellesmere/Te Waihora, Wainono Lagoon and the Rakaia and Rangitata braided rivers
- Supported the development of the Biodiversity Regional Initiatives programme (fish habitat restoration, wilding pine management, braided river habitat protection, and Hunter Hills pest management pilot project)
- Alignment of water quality work across the zones and the simultaneous delivery of regulatory tools and on-the-ground actions
- Developing a regionally integrated approach to infrastructure that pays attention to all the CWMS targets
- Advising on the development of Environment Canterbury's policies and standards for managing the effects of water use on water quality

Regional Committee – current membership

Andy Pearce (Independent chair)
David Caygill (Commissioner)
Tom Lambie (Commissioner)
Phil Clearwater (Christchurch City Council)
Winton Dalley (North Canterbury District Councils)
Angus McKay (Mid-Canterbury District Council)
Peter Scott (South Canterbury District Councils)
Rebecca Clements (Te Rūnanga o Ngāi Tahu)
John Wilkie (Rūnanga Rep – South Canterbury)
Vacant Rūnanga Rep – (Mid Canterbury)
Vacant Rūnanga Rep (North Canterbury)
Hugh Canard (Community rep)
Hamish Cuthbert (Community rep)

Jane Demeter (Community rep)
John Donkers (Community rep)
Rochelle Hardy (Community rep)
Hugh Logan (Community rep)
Ben Curry (Ashburton)
Steve Lowndes (Banks Peninsula)
Vacant (Christchurch West Melton)
Vacant (Hurunui Waiau)
Matthew Hoggard (Kaikoura)
Bruce Murphy (Lower Waitaki)
John Talbot (Orari Temuka Opihi Pareora)
Ron Pellow (Selwyn Waihora)
Barry Shepherd (Upper Waitaki)
Claire McKay (Waimakariri)

Land Use and Water Quality integral to CWMS targets

Water quality is integral to many of the CWMS target areas, and is directly affected by land use practices.

The Regional Committee's Land Use and Water Quality Working Group has taken a leadership role to align work programmes and deliver on-the-ground actions across the zones.

The Working Group ensures a holistic approach is taken to assessing and addressing land use and water quality issues.

It was closely involved in helping to shape Environment Canterbury's Land Use and Water Quality Review, which had a profound impact on the way the council works.

The review advocated the establishment of zone-based delivery teams which are now in place across the region and have developed five-year

strategic outcomes and delivery plans. This shift will enable more efficient, targeted, on-the-ground delivery of the CWMS.

The Regional Committee has supported the Christchurch-West Melton Zone Committee's work on the public stormwater network and in 2016 will extend its focus and explore opportunities to improve urban water quality across the region.

The Regional Committee has also considered the challenges around access to safe drinking water. They have been particularly supportive of the joint efforts of Environment Canterbury and the Canterbury District Health Board to address and raise awareness of issues in this area, such as through the joint work on nitrate levels in community drinking wells.



Flagship biodiversity projects help restore ecosystem health

The Regional Committee identified three flagship biodiversity projects as initial priorities – Te Waihora, Wainono, and the Braided River Flagship (Upper Rakaia and Rangitata catchments) – and committed to funding the projects for five years (see story on braided rivers flagship on the back page).

The committee's Biodiversity and Ecosystem Health Working Group has led an additional workstream providing advice to infrastructure developers. This guidance aims to ensure infrastructure developments achieve ecosystem health outcomes.

The health of the longfin eel population has been a particular focus for the committee. The committee met with key parties interested in eels in Canterbury to better understand the issues and opportunities.

These meetings provided the committee with the necessary knowledge to make a submission to the Ministry of Primary Industries supporting the separate management of long and short fin eel stocks in the South Island. Further work to protect and enhance the health of eel populations will be an ongoing priority.

The committee has also initiated discussions with Merino NZ, Department of Conservation, Forest and Bird, and Ministry for Primary Industries about the potential use of lupins as a fodder crop in the high country. These have informed their support for the proposed approach in the draft Canterbury Pest Management Strategy and the identification of lupins as a pest, thus providing new means of control.



Te Waihora (Lake Ellesmere) is one of the Regional Committee's flagship biodiversity projects that has received a share of \$1.2m over five years

Infrastructure development can deliver multiple benefits

The committee's Regional Infrastructure Working Group (RIWG) leads regionally significant infrastructure conversations and facilitates information sharing across agencies.

Early RIWG achievements include leading the Canterbury Regional Infrastructure Model project and providing the key infrastructure content for the Regional Implementation Programme. (See the story on Managed Aquifer Recharge on the back page).

The Canterbury Regional Infrastructure Model project showed how consented water from alpine rivers could be stored and distributed to take the pressure off lowland ecosystems. It also identified the importance of setting up Infrastructure Node Groups for each alpine river to ensure infrastructure solutions are integrated.

The Regional Implementation Programme develops and champions a regional 'big picture' for infrastructure, that can progress as an integral part of delivering the CWMS.

The Regional Committee has also overseen a series of studies which provide evidence-based information to inform wider thinking around complex regional and localised water management features.

The Ministry for Primary Industries Irrigation Acceleration Fund has been an important contributor to this effort through access to their staff expertise and funding up to 50 percent of project budgets, with the balance provided by Environment Canterbury. Projects supported by the Fund include regional water balance modelling to gain an understanding of the potential effect of efficient use.

In South Canterbury, work has included an updated investigation into the economics of transferring water directly from Lake Tekapo into South

Canterbury; a water resources study on the Orari-Temuka-Opihi-Pareora (OTOP) zone; and a Cultural Opportunity Mapping and Assessment (COMA) study on the Rangitata River.

In the Waimakariri zone, modelling of water quantity, water quality, integration of water infrastructure concepts and a COMA study on the Ashley River have been completed.



The Regional Committee is exploring options to transfer and distribute water south of the Rangitata into South Canterbury

Addressing knowledge gaps around recreation

The Regional Committee has taken the lead in addressing knowledge gaps around recreation and amenity values in the Canterbury region. The publication of comprehensive research into kayaking values in 2014 was welcomed, and followed by subsequent research and publication of a report on jet-boating in Canterbury rivers.

The information contained in these two reports has proved invaluable to zone committees and council staff when developing planning packages, and in identifying key sites for targeted mitigation and restoration work.

Research into swimming values and sites is now underway, as is an assessment of other information gaps and how best to meet these.



The Regional Committee also established a temporary working group in 2014, which suggested some key areas a regional council recreational work programme would need to address. Elements of this programme are now flourishing, such as the establishment of a joint work programme with North Canterbury and Central South Island Fish and Game councils.

The committee is committed to strengthening work on the recreation and amenity targets, acknowledging that these have received less attention than some other areas of the CWMS. A particular focus on swimming resources is a key emphasis for the committee in 2016.

Future work programme

In 2016 the committee plans to

- Progress the exploration and development of the integrated infrastructure options, with a focus on South Canterbury
- Commission a report into swimming values and sites in Canterbury
- Lead a collaboration with other CWMS partners to identify a 5-year work programme for biodiversity work in the region
- Review work on urban water quality
- Continue to develop a regional recreation and amenity work programme

Braided River Flagship project delivers ecosystem benefits

The Regional Committee's Braided River Flagship (BRFS) programme has provided substantial funding to enhance the health of the braided river ecosystems in upper catchments of the Rakaia and Rangitata Rivers.

In its fifth year, this programme continues to make progress across a number of areas including improving breeding habitats for braided river birds, and the health of wetlands and spring-fed streams.

Pest plant control

In 2015 a new and unexpectedly large population of Russel Lupin was found in the Upper Rangitata River near Mount Sunday and its spread has been effectively controlled. Ongoing control work over several years will be required to prevent further spread.

Broom and gorse, plus other woody weeds (e.g. false tamarisk), have been controlled across both catchments using ground and aerial methods. After two years, each area is revisited to control any new plants and prevent further seeding. Each year the control has been extended further downstream. The programme is implemented in partnership with the local land-care groups and other agencies such as DOC and LINZ.

Buddleia follow-up control is being undertaken in the Rakaia to prevent spread into the braided river system. This has been identified as a high priority under the catchment weed strategy as it is the only known population in the upper Rakaia and has started to spread aggressively. If allowed to spread, it would threaten the health of the braided river ecosystem downstream. This work is led by the landowners with funding and support from the BRFS.

The project has been well supported by the local land-mangers, land-care group members, agencies and interest groups.

The overall BRFS work is guided by a strategy which was developed in collaboration with the local landcare groups and a range of stakeholders. The strategy was reviewed by the Regional Committee Biodiversity and Ecosystem Health Working Group (BEWG) late last year, which heard the perspectives and received the broad support of a variety of partner groups and organisations.

Braided River birds

River birds such as wrybill and black-fronted terns, which only breed in braided rivers, require clear open shingle for nesting. A coordinated weed control program to enhance these breeding areas has progressively cleared weeds from a large portion of both catchments beginning with the upper reaches and working down.

Wetland protection and enhancement

Other work underway this season includes the final stages of the Deep Stream project on the south side of the Rangitata managed by Fish and Game. This project has included fencing and habitat restoration (through willow control and tussock planting) over several years of a large section of the spring-fed stream and a large wetland. This has been very successful, resulting in a flushing of sediment, restoration of clear gravels and healthier riparian margins as well a healthier, less weedy wetland.

A new project to fence several high value wetlands areas has commenced on Mount Algidus station in the upper Rakaia this year. The wetlands are also being considered by the QEII National Trust for possible covenanting. The BRFS is contributing funding (about 1/3rd) to this project.



Managed Aquifer Recharge/ Targeted Stream Augmentation trials

Managed Aquifer Recharge (MAR) introduces additional water to depleted ground and surface water via seepage through the ground. This approach could enable the achievement of multiple CWMS targets. The Regional Committee has worked alongside the Ashburton and the Selwyn Waihora Zone Committees to ensure that investigations of Managed Aquifer Recharge (MAR) proceed in Canterbury, and that there is a coordinated approach to increasing information across the region.

In the Hinds Plains a pilot study is underway to soak surface water supply through a former gravel pit. The study is supported by a

range of private sector, central government and local government sources. It will explore what contribution adding water can make to meeting nutrient limits in groundwater, as well as managing flows in lowland streams.

In the Selwyn District a variation of MAR that is known as Targeted Stream Augmentation is being evaluated. This involves introducing extra water via a water supply introduced through shallow excavations near lowland streams with the intent of enhancing flows and ecosystem values in key streams.

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