Annual Report for the Community 2015

Working with the community to deliver their aspirations for freshwater

The Selwyn Waihora Zone stretches from the upper Waimakariri basin and the high country around Lake Coleridge down to Te Waihora/Lake Ellesmere. Te Waihora/Lake Ellesmere and its margins are a taonga (treasure) to Ngãi Tahu, reflecting the area's cultural significance and the concentration of mahinga kai, wāhi tapu and wāhi taonga.

The Selwyn Waihora Zone Committee was formed in 2010 to work with the community, rūnanga and councils to develop and implement water management recommendations which deliver the vision of the CWMS.

Its first goal was to develop a Zone Implementation Programme (ZIP) to deliver environmental, economic, social and cultural outcomes. This was finalised and accepted by councils in 2011. The committee has since developed recommendations for Te Waihora/Lake Ellesmere and its catchment in its Selwyn Waihora ZIP Addendum.

These recommendations will be delivered through the Selwyn Te Waihora Plan Change to the Canterbury Land and Water Regional Plan, which became operative in February 2016.

CWMS VISION:

To enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.



Key achievements 2010-2015

The CWMS is not just about words, programmes or plans – the committee is supporting, driving, and celebrating on-the-ground actions to deliver sustainable benefits from water.

- Almost \$500,000 of Immediate Steps funding has been allocated by the zone committee to local initiatives to protect and enhance the natural environment with at least a further \$250,000 from farmers and other parties
- Whakaora Te Waihora, a joint restoration programme funded by Ministry for the Environment, Environment Canterbury and Te Rūnanga o Ngāi Tahu, commenced in 2011
- Stage 1 of the Central Plains Water (CPW) Irrigation Scheme opened in August 2015 resulting in 15,000 ha being converted from groundwater irrigation to surface water irrigation (using water from Rakaia River and Lake Coleridge)
- Farm Environment Plans have been developed for around 300 properties in the zone
- New limits, rules and policies to manage water quality and quantity in Te Waihora and its catchment have been put in place through the Selwyn Te Waihora sub-regional plan.

Selwyn Waihora Zone

The Selwyn Waihora Zone covers the Selwyn District and a small area of Christchurch City. It includes

Te Waihora/Lake Ellesmere and its catchment (including Selwyn River/Waikiriri, spring-fed lowland streams, and some of the Port Hills streams), Lake Coleridge, the Rakaia River and the upper Waimakariri basin.

It is a joint committee of Selwyn District Council, Christchurch City Council and Environment Canterbury.

It is in the rohe of Wairewa, Rāpaki, Taumutu, Tūāhuriri, Koukourārata and Ōnuku rūnanga.

Delivering the community's goals for Te Waihora/Lake Ellesmere

The Selwyn Waihora Plan Change puts in place policies and rules required to restore the mauri of Te Waihora/Lake Ellesmere while maintaining prosperous land-based economy and thriving communities.

It will achieve this by introducing catchment limits for nitrate losses from land-use discharges, community sewage and industrial activities. It also sets limits on surface and ground water takes, and minimum flows on rivers and streams.

The Selwyn Waihora Plan Change implements zone committee recommendations to achieve the community's goals for the Te Waihora/Lake Ellesmere catchment.

Key features of the Selwyn Waihora Plan Change

- A Cultural Landscape Values Management Area recognises the significance of Te Waihora/Lake Ellesmere and its margins
- A nitrogen load limit has been set for agriculture in the catchment and for new CPW irrigation
- All farmers will be required to be operating at good management practice by 2017 and reduce nitrogen losses by 2022
- Major water storage in the upper Selwyn/Waikiriri and Waianiwaniwa rivers is prohibited.





Central Plains Water is key to delivering some of the community's freshwater goals

Central Plains Water (CPW) key to delivering water outcomes

The implementation of the Central Plains Water (CPW) irrigation development – which will use alpine water from Rakaia and Waimakariri rivers – is key to delivering some of the freshwater goals in the catchment.

CPW will use alpine water to replace groundwater takes which currently irrigate 30,000 ha. This replacement will significantly reduce groundwater takes in the zone, increasing flows in the lowland streams, which will improve the health of these streams and the water quality in Te Waihora/Lake Ellesmere.

CPW also includes 30,000ha of new irrigation development. This will increase nitrogen losses in the catchment. However, the amount of increase is limited through a nitrogen allocation under the Selwyn Waihora sub-regional plan.

CPW Stage 1 opened in August 2015 and supplies water from the Rakaia River (and Lake Coleridge) to 110 farms. This water replaces groundwater abstraction previously irrigating 15,000 ha. All 110 farms in Stage 1 have completed a Farm Environment Plan.

Creating a network of biodiversity in Hororata River catchment

The Hororata River is a significant tributary of the Selwyn River/Waikiriri. The catchment includes habitat of the threatened Canterbury mudfish.

Around \$154,000 of Immediate Steps funding has been invested to support the protection and enhancement of remnant native biodiversity in wetlands, springs and riparian margins to help create a biodiversity network throughout the catchment, from the hills to the lake.

11 projects have been supported with this funding.

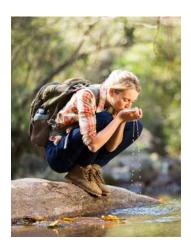


Community planting day on the Hororata River

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Progress towards achieving CWMS Targets

| Ecosystem Health and Biodiversity | Rehabilitating Te Waihora/Lake Ellesmere is a key focus for the committee. To date, more than \$10 million has been funded by the MfE, Te Rūnanga o Ngāi Tahu, Fonterra, DOC, Environment Canterbury, and others. |
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| Natural Character of Braided Rivers | Funding from the Regional Committee has helped control gorse, broom and wilding pines in the upper Rakaia catchment (above the Harper confluence). |
| Kaitiakitanga | The Selwyn Waihora Plan Change recognises the significance of Te Waihora/Lake Ellesmere, and establishes a Cultural Landscape Values Management Area. This further protects the lake margins, lower reaches of the Selwyn river/Waikirikiri and other streams in the catchment. However, further work is needed to increase the understanding of kaitiakitanga¹ and mahinga kai.² |
| Drinking Water | Selwyn District Council continues to manage risks to community drinking water supplies. The Selwyn Te Waihora Plan Change limits the increase in nitrate concentrations for shallow groundwater, that is the source of drinking water for about 5% of households, however there will still be peaks in nitrate levels above the national drinking water standard. |
| Recreational and Amenity Opportunities | All properties in the Silverstream catchment are working to reduce microbial contaminants and make Coes Ford safe for swimming. Most properties have completed Farm Environment Plans. |
| Water Use Efficiency | Implementation of Good Management Practices will require enhanced irrigation efficiency. Irrigation NZ has launched the SMART irrigation public awareness campaign for urban and rural irrigators. |
| Irrigated Land Area | CPW Stage 1 has been completed with design and planning underway for further stages. |
| Energy Security and Efficiency | CPW Stage 1 has reduced electricity use in pumping by replacing groundwater takes and distributing water under pressure. |
| Regional and National Economies | Economic growth in the district is maintained by ensuring farm activities meet good management practices. Further irrigation within CPW will also assist economic growth flowing from rural Canterbury into the cities and towns. |
| Environmental Limits | The Selwyn Te Waihora Plan Change sets minimum flows, water abstraction and nutrient discharge limits. The first land use consent applications have been submitted as part of protecting high country sensitive lakes. |









Key work programmes underway to deliver water management priorities

The zone committee's vision is to restore the mauri of Te Waihora/Lake Ellesmere while maintaining the prosperous land-based economy and thriving communities around it. It also aims to protect the natural values of the alpine rivers and of the high country.

The committee has supported work programmes by Environment Canterbury and a wide range of other organisations to deliver this vision. These focus on four areas:

1. Lake rehabilitation:

- Whakaora Te Waihora, a joint restoration programme funded by the Ministry for the Environment, Environment Canterbury and Te Rūnanga o Ngāi Tahu, has helped plant 100,000 native plants and investigated alternative lake opening options.
- The Living Water partnership between Fonterra and the Department of Conservation is supporting initiatives in the L-II/ Araria to improve water quality and in-stream health. This includes support for University of Canterbury research into best-practice

riparian management for drains. In addition, Fonterra has invested \$1.3 million in on-farm support to improve nutrient management and in biodiversity projects.

2. Good Management Practice (GMP):

- Around 300 Farm Environment Plans completed.
- In the Silverstream catchment a major contributor to the Coes Ford recreational site on the Selwyn River - all land owners have excluded stock from the stream and main tributaries.
- 3. Using "alpine" water to replace groundwater irrigation:
 - Stage 1 of CPW replaces groundwater takes for about 15,000ha
- 4. Maintaining or improving biodiversity values in wetlands, the Hororata catchment, and the high country.
 - 14 wetland projects, 11 projects in the Hororata catchment, and 7 projects in the high country.

¹ Kaitiakitanga is the traditional Māori philosophy of resource management. Some of its key principles are: Whakapapa (Genealogies and Generations), Ki uta, ki tai (From mountains to sea), Mauri (life, health and vitality), Wakawaka (Hunting and Gathering Grounds), Utu (Balance, Reciprocity).

²Mahinga kai - the customary gathering of food and natural materials and the places where those resources are gathered.

There are still important local water management challenges to be met

The zone committee will continue its work with Environment Canterbury and other organisations to deliver the community's aspirations for water management.

In particular, the committee will focus on working with primary sector organisations, rūnanga and Environment Canterbury on the implementation of the Selwyn Waihora Plan Change.

The committee will specifically look at how simple land-use consents can support land-users to develop good land management practices. As part of this, work will continue with local rūnanga on the implementation of the Cultural Landscape Values Management Area around Te Waihora/Lake Ellesmere.

The committee is also supporting programmes to increase flows in key lowland streams through augmentation from stock water races (using CPW water) or from groundwater.









Challenges and opportunities

The zone committee's package of recommendations for the Te Waihora/ Lake Ellesmere catchment includes catchment and lake interventions, as well as planning and policy tools.

Bringing all of this together and finding funding will be a significant challenge over the next ten years.

These challenges include progressing:

Lake interventions, such as:

- Improved lake-level and lake-margin management (including lake opening)
- Addressing the legacy phosphorus, from historical land use, in the lake-bed sediment
- Restoring macrophyte beds
- Enhancing and creating wetlands, both on the lake margins and floating wetlands in the lake.

Catchment interventions, such as:

- Effective riparian margins on many kilometres of lowland streams and drains
- Targeted stream augmentation to improve flows in lowland streams
- Farming at good management practice and better.

Key events for 2016

The zone committee will help launch the Selwyn Waihora Plan Change at community meetings when it becomes fully operative in February 2016.

Zone committee members reflect a diverse range of community views

Each of the Canterbury region's ten zone committees include 4-10 community members whose membership is regularly refreshed to ensure a wide-range of perspectives are reflected.

This year the committee sought new committee members and Victor Mthamo was appointed. The full list of members can be found below

Allen Lim (Chair, community member) Charlie Crofts (Deputy chair, Koukourārata) Bill Lambie (community member) Hayley Moynihan (community member) John Sunckell (community member) Maree Goldring (community member) Ron Pellow (community member) Victor Mthamo (community member) Clare Williams (Tūāhuriri) George Tikao (Ōnuku) Riki Nicholas (Wairewa) Terrianna Smith (Taumutu) Te Whe Phillips (Rāpaki)

Tom Lambie (Environment Canterbury Commissioner) Cr Pat McEvedy (Selwyn District Council)

Cr Tim Scandrett (Christchurch City Council)



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