

Otago Catchment Stories

Summary Report

Prepared for the Otago Regional Council's Economic
Work Programme



Otago
Regional
Council



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Prepared By:

Kim Reilly
Landpro Limited

Prepared For:

Otago Regional Council

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ORC Economic Work Programme

This report is the second in a series of five reports from Otago Regional Council's Economic Work Programme, which was designed to support the development of the Otago Land And Water Regional Plan.

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Farmland near Middlemarch, Otago
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1. Executive Summary

The Otago Regional Council (ORC) is in the process of developing a proposed Land and Water Regional Plan (pLWRP) to give effect to the National Policy Statement for Freshwater Management 2020. This includes setting limits and developing policies and action plans to improve the region's freshwater management and meet the community visions identified in the proposed Otago Regional Policy Statement.

Otago is a highly variable region through its topography, climate, and soils, with distinct points of difference between each associated catchment and community. Land use across the region is also variable, ranging from more widespread traditional rural land uses to diversified interests, with many districts now a patchwork of rural, peri-urban, and urban communities.

The Catchment Stories Project was initially set up to gain a socio-economic perspective for the Economic Impact Assessment (EIA) of the pLWRP. It will provide Council with a better context and understanding of what local communities are already doing to manage land and water across the region, along with the challenges they face.

Those who provided input to the Catchment Stories Project came from across Otago, from a range of land use activities, and included both catchment group and wider primary sector viewpoints, along with urban community voices.

Each group was unique in their reasons for forming, the composition of their members and communities, and the issues of significance and priority to them. Nevertheless, they faced common challenges, and had similar views about what 'success' was.

Irrespective of where they were on their journey, all indicated a strong desire to stay working together, to strengthen connections with iwi, stakeholders and wider communities, and to find a way for both businesses and communities to remain viable in the face of rising pressures and challenges.

It was accepted that all land use activities in their area had a part to play in responding to and managing the impacts from their activities, and in improving environmental outcomes. Many interviewees noted that making small changes to practices and daily management decisions now, could cumulatively make a big environmental difference.

Many acknowledged the inevitability of some land use change in their areas, noting that this is not new to Otago. However, the current stress arises from not knowing what future land use change might look like, and how well the community would be supported through transition.

Funding for groups and projects comes from diverse sources and in some cases is significant in size. However, farmer funding and in-kind contributions remain the most important ongoing factor to a group or project's momentum and success. It was noted that external funding comes with challenges for groups: meeting milestone reporting requirements and dealing with a generally fixed 'scope' being two specific concerns raised.

A range of different approaches was taken within each group or sector, with many tailoring these to meet their own unique demands, goals, challenges, and priorities.

Many groups emphasised the importance of having a coordinated strategy and plan, aligned with both short-term and long-term goals and visions.

Multiple groups talked of the challenges associated with having a large geographical area, or distance between members, particularly in extensive sheep and beef farming areas, resulting in a need to keep meeting topics focussed, and travel to a minimum.

There was wide acknowledgement of the need to take the time to celebrate the achievements and progress being made along the journey to longer-term goals, and to find ways to tell the farmer/grower story better.

There was a strong recognition of the need for group members to uplift each other, to share learnings to encourage a general uplift in outcomes, and to put an ongoing focus on community wellbeing.

Some of the key areas of current progress, and where success is being seen on the ground, included projects and practice changes around:

- Riparian protection
- Stock exclusion
- Biodiversity maintenance, restoration and protection
- Better endeavours to monitor water quality
- Investment in more efficient water use
- On-farm water storage
- Changes to cropping and high-risk activities like intensive winter grazing
- Weed and pest control
- Investment in catchment management plans, and individual farm environmental plans
- A greater focus on soil health; and
- Improved waste management.

There were numerous themes relating to challenges, or 'roadblocks', reported by both groups and individuals. From a catchment group perspective, a key challenge was how to retain or improve the participation and engagement within the group.

Significant concerns were noted around the volume and pace of regulatory pressures from both central and local government, with a general sentiment that the 'negative' is now overpowering the 'positive', with the focus being on what cannot be done, rather than on opportunities.

There was a general feeling that despite the physical potential for growth in some sectors, there were regulatory restrictions or barriers that often prevented that growth being realised.

Other challenges included a perceived urban disconnect, significant cost of living concerns, pressures on both labour and volunteers and importantly, a need to balance farmer and grower time and focus.

Each group had suggestions they thought would be useful to share with others, and a winegrower group in particular noted their interest in open sourcing their learnings.

The core theme of that advice was to remember that each catchment or community group is different, and that what works for one group, might not necessarily work for others. It was felt that being at the

right scale helped, as did the need to remain outcome-focused rather than being distracted by metrics.

It was also noted that groups cannot do everything all at once or be all things to all people. It was strongly agreed that there was a need to support leaders socially, technically, and financially.

Ultimately, what came through clearly from the project was that for catchments and communities of Otago, there is no 'one size fits all' when it comes to how catchment groups should operate, and that ultimately it is the activation of community members that makes a difference when it comes to success on the ground.

It was also emphasised that knowing what progress is, is key, and that success is often simply the movement in the right direction. Importantly, it was advised that there is a need to be both patient and compassionate, as this is an intergenerational challenge our communities are facing.

2. About the Catchment Stories Project

2.1 Purpose

The National Policy Statement for Freshwater Management 2020 requires the Otago Regional Council (ORC) to set limits for water quality and quantity and to prepare action plans, which may include both regulatory and non-regulatory actions.

As a part of this workstream, economic and social impacts are important considerations, alongside cultural and environmental workstreams.

A key means of both informing and implementing improvements to freshwater management in Otago is the ongoing work of catchment and community groups. As of July 2021, there were an estimated 22 catchment groups across Otago, with a total of 1,352 members, with further catchment groups being considered and membership growing. The Otago Catchment Community, the New Zealand Landcare Trust, Beef + Lamb NZ, and individual community leaders have been instrumental in both the development and implementation of these catchment groups.

Catchment groups offer an important avenue for improving freshwater management as well as an opportunity to build better relationships between communities and ORC. By developing a better understanding of the progress, challenges and issues each catchment group is facing, ORC can understand how they can structure work programmes to support and/or build on existing community efforts.

The Catchment Stories Project was set up to enable a better understanding of what local communities are already doing to manage land and water across the region, and what challenges they currently face.

Catchment groups, however, are not all encompassing in their coverage of livelihoods within Otago's catchments, and in discussing the project with stakeholders and partners it became apparent that a wider range of groups were interested in contributing to the project.

This report is the second in a series of reports for the ORC's Economic Work Programme as part of the pLWRP to contribute to the Economic Impact Assessment. In the short-term, the knowledge gathered from the project is essential for a better-informed Economic Impact Assessment, but it also provides a robust foundation and benchmark for future work and understandings in the longer term.

The purpose of the Catchment Stories Project was therefore to gather information about:

- The background, and approach taken by different catchment groups;
- The actions and practices being implemented in catchments, and their perceived success;
- The local scale issues and challenges in different parts of Otago.

This information will be used to inform the Economic Impact Assessment for the pLWRP. It will also be used to start developing a better understanding of the nature and diversity of connections between natural resources, people and communities in the region.

2.2 Method and limitations

As a first step to initiating the project, ORC provided information directly to industry groups, mana whenua contacts and provided additional information on their website.

To further target the promotion of the project and to gather interest in participation, an email was sent to the leaders of all (or the vast majority) of catchment groups across Otago, with many recipients subsequently agreeing to become involved. In situations where there was an existing relationship with a catchment group, a phone call was followed up after an email outlining the project.

Some leaders were happy to arrange their time to meet in person, or to talk on their group's behalf. Others opted to instead offer their personal views and experiences and suggested additional contacts, while other groups opted to assemble their wider group to provide input.

All groups involved received a copy of their draft report, from which they could circulate to wider members, with many adding further valuable information and input.

Not all groups were able to or had the time, interest in, or capacity to become involved. A couple of groups subsequently expressed interest in participating later on in the project.

A range of other land users across Otago, whose views would not be captured if the reports were solely restricted to farmer-focussed catchment groups were contacted, with a number agreeing to be interviewed. This enabled the gathering of some wider input, including for example, from winegrowers, horticultural and vegetable growers, community groups, and individual community members. The content of these interviews is also reflected in this summary report.

Individual reports were written up for each area of Otago along with responses from the catchment or community groups, farmers, growers or others interviewed as part of the project. The reports reflect the responses, feelings and sentiments of those interviewed at that point in time, and are largely informal views, anonymously gathered. This summary report endeavours to pull together the common themes arising from those responses into a summary report for the purposes of the Economic Work Programme.

3. Introduction

3.1 Context

Otago has had a rich history of primary production land use since early settler times, with the sector still playing a key role across the region today, as it will continue to do into the future.

Otago is a highly variable region in topography, climate, and soils and as a result there are distinct points of difference to the land use within each of the sub-regions of Otago: Central Otago, North Otago, Coastal Otago and South Otago. These differences are reflected within each catchment and community within. No two Otago communities or catchments are the same.

There are a myriad of factors which have influenced how different land uses became established across Otago, including proximity to markets, subsidies, irrigation access or expansion, new market or product opportunities, and primarily, suitability of climate, topography and soils for that land use purpose.

As a result, catchments across Otago include a wide range of land use types: from the traditional uses of sheep and beef farming, dairy farming, dairy support, deer, arable, horticulture, viticulture, poultry farming, pig farming, and forestry, through to new markets around hydroponics, walnuts, olives, flower growing, and a range of other new crops, or tourism ventures. Otago also includes rural communities that are often strongly interconnected to, and reliant upon the primary sector – from schools, cafes and pubs, through to other local, and rural support businesses.

Kāi Tahu also have a deep and longstanding connection with Otago's catchments. These are regarded as wāhi tūpuna (ancestral landscapes) with many values and associations related to cultural traditions and the history of use for mahika kai and other purposes, and as travel routes to and from other areas. Wāhi tūpuna are characterised not only by natural and physical aspects, but also by the traditional place names that provide ongoing connection to Kāi Tahu history and traditional stories.

Biodiversity, landscape and recreational values are also high across Otago, and contribute to the importance of tourism.

Each community across Otago is different. What has become apparent from this project is that it is typically the activation of community members that make a difference when it comes to achieving goals on the ground, and therefore that keeping the community working together on solutions, and sharing learnings, challenges and opportunities ensures the best chance of success.

3.2 Land use

As noted above, there is rich diversity to land uses across Otago. There are also substantial forestry areas, QEII covenanted areas, public conservation and council reserve land, and in East Otago the Macraes (Oceana Gold) open pot and underground gold mines.

Some Catchment Groups have a strong sheep and beef farming membership, while others (such as Maungawera Valley) have strong involvement from lifestyle farmers. The Open VUE community project includes urban, peri-urban, tourism and rural land uses.

Feedback from those interviewed, consistently agreed that all land users in their area had a part to play in responding to and managing the impacts from their activities and in improving environmental outcomes.

Many acknowledged the inevitability of some land use change in their areas, noting that this is not new to Otago, where land use has changed over time. It was noted, however, that currently there is the additional stress of not knowing what any land use change might ultimately look like, and if and how well the community will be supported through any transition.

Some areas, particularly those that are water-short, noted that there are climatic constraints that will impact the diversification opportunities available to them. It was felt that access to sufficient water was a critical component to the extent of their likely future 'options'. In the Upper Taieri for instance, it was noted that the severity of winter temperatures and the risk of out of season frosts likely negated any meaningful at-scale horticultural opportunities, and also that the potential for expansion of arable cropping was limited.

In East Otago, the group noted that they anticipated some land use change over the coming decades, both as a result of climate change, and due to local and central government regulations. They felt that this brought both challenges and opportunities to their communities. The opportunities depended on the catchment's topography, climate, location and landscape, including its location relative to a Port. They envisaged greater on-farm diversification into the future, including the potential for cropping. It was noted that key to success, was to ensure that regulations enabled the necessary agility to respond to changing markets, consumer preferences, climate, innovation, and system needs.

Forestry was polarising and perceived as both an opportunity and a strong negative or concern. In Upper Taieri it was felt that forestry was not a viable option for their area, given existing landscape zoning restrictions. In Tahakopa and East Otago, there were concerns with the potential for further whole farm sales to forestry, noting that the social impacts fell on rural communities, schools and wider support sectors, in addition to the environmental impacts such as increased sedimentation, impacts on water yield, spread of animal pests and wilding conifer issues.

Urban development as a result of population growth, and the desirability of this in their areas, remained a key concern to the Friends of Lake Hayes group, and to a degree to Open VUE.

Tourism and other recreational opportunities were noted as maybe being an option for some areas to supplement farming, but it was not considered likely to be a meaningful alternative at scale for many groups.

4. About the Catchment Groups Involved

The catchments where the groups interviewed are represented, is shown in *Map 1* (p12). A list of the participating groups is provided in the Appendix (p28).

4.1 Establishment

Of the groups listened to, some were set up as far back as the 1990s, while others established more recently, often as a response to increasing regulatory pressures and uncertainty.

The **Pomahaka Catchment Group** was one of the earliest groups to establish in Otago, and along with NOSLaM, maintains a relatively high profile across the country, winning numerous awards and receiving a number of ongoing requests for advice or information.

Upper Taieri Wai, which started as the Upper Taieri Water Resource Management Group, was New Zealand's first large-scale integrated catchment management project in 2007. It was set up to progress the transition from deemed permits. The **Kyeburn Catchment Group** had a similar reason for forming, first coming together back in 2009 following encouragement from ORC to go down the path of a community led water sharing and allocation approach, and ultimately a pathway towards global consent.

The **Wānaka Catchment Group** started around 2013, following ORC's outcomes on Plan Change 6A (PC6A), with an initial focus on achieving an improved scientific understanding of the area, and a calibration of Overseer in their environment.

Open VUE (Open Valley Urban Ecosanctuary) started coming together in 2016 following a Curious Minds project, later building on that momentum to cover a range of projects of interest to North East Valley residents, including those associated with backyard biodiversity (biophilic city), pest trapping, river restoration and the wider connection of urban and rural communities. The group's vision is to have nature in the neighbourhood.

The **East Otago Catchment Group** formed in 2019 to help facilitate farmer-led change towards the improvement of waterways and streams in their area, both for now, and for future generations. They wanted to be proactive in the face of growing regulatory changes and expectations. The **Lake Wakatipu Catchment Group** formed in 2020 for similar reasons, with a primary goal of wanting to invest in quality Farm Environmental Management Plans (FEMPs) across the catchment, so that members could better understand how their management impacted the environment, and how they could continue to improve and protect their important area into the future.

Tahakopa is a group of six local farming landowners who came together to help find local solutions to local issues. They, like a number of other groups, including the **Glenorchy Catchment Group**, formed to help members better understand and navigate a way through regulation; and to have a greater sense of ownership in determining the catchment's destiny.

The **Friends of Lake Hayes** was set up around 15 years ago by a group of Lake Hayes residents concerned with the deterioration of the lake. They continue to have a strong commitment to the success of their objectives and consider the work only really just beginning.

It became clear from all of those interviewed, that each group's reasons for forming were quite distinct to their area, to the composition of their members and communities, and to the issues of significance

and priority to them. However, they all indicated a strong desire to stay working together, to retain momentum, and to find a way for both businesses and communities to remain viable in the face of a range of rising pressures and challenges.

4.2 Stakeholder engagement

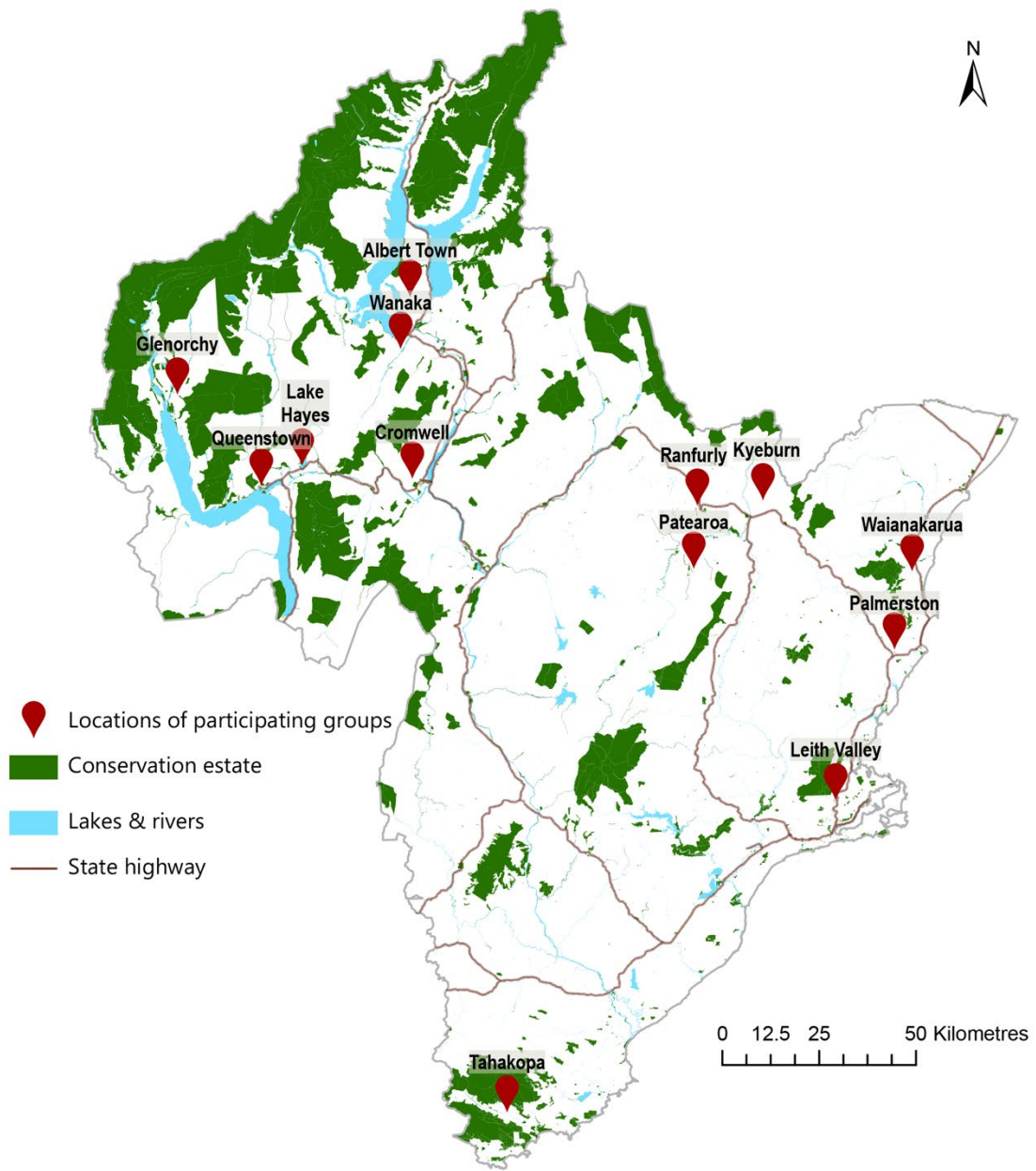
The vast majority of interviewees had a positive view of the involvement of stakeholders in their projects and groups.

In particular, there was a common desire to foster stronger iwi relationships and more active rūnaka connection with groups across the board. East Otago Catchment Group had a strong connection with Puketeraki and this was seen as a real positive. Some other groups had connections with individuals affiliated to papatipu rūnaka in relation to some of their work programmes and this was also really valued.

There is typically a strong relationship between groups and their local schools, and every group interviewed noted the importance of forming and retaining these connections. For Open VUE, this extended to input from the Otago University (in particular, from the Zoology and Geography departments).

Most groups had existing connections to ORC staff, particularly with Catchment Advisors (Environmental Implementation) and Science teams, and with local councillors, and these connections were generally spoken of positively. Consents staff, in particular, were acknowledged to have recently been supportive on hot topic issues, such as intensive winter grazing, which is currently one of the big issues facing farmers. Sentiments were generally less positive when planning matters were discussed – noting a feeling of disconnection, or not feeling listened to – but it was acknowledged that this was not helped by the increasing central government regulations that required planning teams to respond.

Groups with strong stakeholder input, emphasised a desire to retain that buy-in, acknowledging the significance of that input and commitment to their group.



Map 1: Catchments covered by interviews

4.3 Funding

Groups noted that they have received funding from a range of sources, although common sentiment was that farmer funding, along with in-kind contributions, are the most important ongoing factor to a group or project's success. However, wider funding and support, alongside members' own contributions, has enabled catchment groups across Otago to undertake a range of projects.

Many groups, for example Maungawera Valley, recognised the importance of ensuring as many initiatives and actions as possible were self-funded and self-resourced by members of the group, as this supported a sense of ownership of issues, actions, and solutions. They felt it ensured members' ongoing buy-in, involvement and commitment to solutions. Importantly, they felt it also avoided the pitfall of trying to fit within restricted criteria/measures or milestone reporting deadlines.

Large scale funding for some groups has come from the Government's Freshwater Improvement Fund (FIF), as part of the Jobs for Nature (J4N) programme.

Many have received support from Beef+Lamb NZ in helping to establish their groups, along with vital support from entities like the Otago Catchment Community (OCC), the Red Meat Profit Partnership (RMPP), NOSLaM, Wāi Wanaka, Otago South River Care, and the Clutha Development Trust.

Open VUE noted that they receive funds from various grants, including Predator Free Dunedin's City Sanctuary Project, PSP Curious Minds, the ORC's Ecofund, Lotteries Grant, and others.

Vital in-kind support across the groups has come from a range of sources, including from ORC, territorial authorities, the Department of Conservation, the Otago Fish and Game Council, the Walking Access Commission, the University of Otago, and others.

The Friends of Lake Hayes Group noted that they received \$1 million of donated funds from a local resident to go towards a specific project, 'Vision Lake Hayes', which aims to minimise nutrients and sediments arriving in the lake.

4.4 Approach taken with individual groups and communities

A range of different approaches as to how they best operated and achieved success were being taken within each group or sector interviewed, with each largely tailoring that approach to meet the group's membership, objectives or priorities.

Many groups emphasised the importance of having a coordinated strategy and plan that was closely aligned with both short-term and long-term goals and visions.

Another common theme was the acknowledgement and promotion of the idea within groups that making small changes to practices and daily management decisions can cumulatively make a big environmental difference.

Larger groups discussed utilising smaller sub-groups, noting that what might be an area of priority focus for one part of the catchment might not necessarily be the same for others; with sub-groups helping ensure the right degree of ongoing interest, buy-in, momentum and motivation.

Groups talked of the challenges associated with having a large geographical area, or distance between members, particularly in extensive sheep and beef farming areas. This resulted in a need to keep meeting topics focussed, and the need to keep travel to a minimum.

Many groups, including Upper Taieri, found it beneficial to have a strong participant base but also an ability to lean on external stakeholders and experts as and when needed. They felt it was vital to find ways to take the pressure off volunteers, to avoid fatigue and burnout.

For many interviewees, the importance of 'walking the talk' was emphasised when it came to being proactive leaders within their local communities. It was noted that leaders often invest considerable time, resources and energy into achieving the group or sector's wider visions and objectives.

The Tahakopa, Glenorchy and Lake Wakatipu Catchment Groups have only small member numbers, and so have had to adapt their approach to meet that challenge. For instance, if one or two members cannot make a meeting or workshop, it made continuing with the planned session less worthwhile.

The Friends of Lake Hayes group revolve all of their work around a core project, which is strongly informed by science, and they consider it could be scalable and transferrable as an approach to other 'at risk' catchments.

The Wānaka Catchment Group has a similar approach of keeping focus to a core issue (water quality) and endeavouring not to get distracted from that. They also try to minimise group meetings (keeping to 1-2 a year) and instead concentrate on having a facilitator working on a one-on-one basis with farmers (with discussions tailored to that property and those farmers).

For Maungawera Valley, the focus is on simply getting everyone in the community working together – which required from the outset getting lifestyle block owners' involvement and support. Their approach is to target projects to all landowners – focussing on matters of common interest like planting, animal and plant pest control plans, and water testing.

5. Current Progress and 'Most Proud Of' Moments

Groups and individuals listened to all recognised the need to celebrate achievements and progress being made along the journey to longer-term goals. Many noted that there was a wider need to tell the farmer/grower story better, and that sharing a group's 'wins along the way' was vital to retaining members' interest, buy-in and motivation, particularly when the perception is that those outside the rural community only hear of farming's perceived 'negative' outcomes.

There was a strong recognition of the importance of the group being there to uplift each other, to share learnings and stresses, and to put an ongoing focus on community wellbeing.

Groups noted that working with schools and local communities was an important means of ensuring they are aware of the good work going on, and what challenges are being addressed.

There was some recognition of the importance of increasing the group or sector's knowledge, understanding and appreciation of cultural, recreation and historic values. Upper Taieri Wai noted the success of an experimental planting trial, undertaken to utilise plant growth, by arrangement with Kāti

Huirapa ki Puketeraki. Appreciating a range of values also came through as a key driver for winegrowers interviewed, with many embracing the history, culture, (including early goldmining and Chinese settlers) and amenity values of their area.

The core themes across all actions currently underway, including matters interviewees were most proud of, largely fell into the following areas, and is summarised in *Table 1* by Rohe:

About groups:

- **Sharing learnings and general uplift of outcomes and practices:** This was evidenced by comments such as ‘farmers encouraging farmers’, and with ‘a focus on educating, not lecturing’. Groups and individuals took a range of different approaches to share learnings – including on-farm field days, newsletters, emails, social media, working groups, and webinars. Many groups were encouraging input into trials, or testing innovative ideas, with the intent to then share learnings more widely (both from successes and failures).
- **Ongoing momentum, group member and stakeholder input:** core to all groups’ ‘most proud of’ feedback was their ongoing member commitment, buy-in and update of positive changes to practices. This included recognising the importance of the connections they had made with stakeholders, rūnaka, members of the community, and local schools, with these matters being an ongoing emphasis.

About group activities:

- **Riparian protection:** For many groups and sectors, fencing and planting of waterways has been a key focus and an early opportunity to get the community involved, and to get ‘runs on the board’. Multiple groups had put a strong focus on reducing stock access to waterways and other sensitive areas, particularly those in high visibility areas (often even when regulations did not require it). There was an understanding by many that if it was feasible and affordable to reduce stock access, this should be done. Similarly, work was underway in many areas in both assessing fish populations within waterways, and in protecting indigenous fish habitat.
- **Biodiversity maintenance, restoration and protection:** Native plant propagation, collecting native seeds and seedlings and dispersing them to members to plant has become a strong focus for many groups, and for the winegrowers interviewed. Many built on these activities by having group planting sessions. Similarly, groups noticed an increasing focus on restoring wetlands, and otherwise enhancing habitat for indigenous fauna. Groups are also now investing in expert advice as to which species to plant, and where and how to keep plants alive (particularly in water-short areas). Winegrowers discussed the successful biodiversity initiatives many were utilising and noted that they are now finding ways to leverage off this through brand promotion and marketing.
- **Water quality and use:** This is a priority work focus for most groups interviewed. Progress is being made on increasing waterway monitoring and water quality testing programmes in many areas. There is also an increased focus on improving the efficiency of water used and promoting on-farm water storage to relieve the pressure from waterways during water-short times of the year. In Kyeburn, success was achieved from negotiating a comprehensive legally binding water sharing agreement and regime. The collaborative approach taken was vital to the group’s success. For viticultural water use they place a strong emphasis on only using what they need.

It was noted that water is critical for vine irrigation, frost protection and wine making, so good water quality is in their interest.

- **Intensive Winter Grazing (IWG) practices:** Most groups noted a strong focus over the past 18 months towards improving IWG practices. Support has also been provided from ORC (field days and workshops), OCC, and industry groups, providing information on good management practices (GMPs), regulatory expectations and consent requirements. Each group talked of visible improvements of IWG in their area, and this was a point of pride. Multiple interviewees talked about improved locations of cropping becoming second nature now – although concerns remained around the difficulties associated with regulatory restrictions on IWG on over 10-degree slopes. There is a strong ongoing commitment to improving IWG practices, and all of those interviewed are aware of the need to show improvements and have a greater awareness of public perception issues.
- **Weed and pest control and management:** Many groups have committed time and resources into the control and ongoing management of weeds and pests, seeing this as vital to improving biodiversity, and also to ensure survival of crops, vegetation and riparian planting. Successful group and individual projects include work to reduce wilding trees, willows, gorse and broom, geese, possums and rats, goats and pigs, and other pests. Open VUE have successfully encouraged backyard monitoring and trapping through the provision of rat traps to residents via a trap library. Winegrowers noted that they were investing in and encouraging the adoption of non-chemical methods of control wherever possible, utilising a raft of non-chemical means, including cultural control methods (pruning and open canopies), and the use of African Boer goats to keep on top of weed plants in a way that didn't rely upon chemical herbicides.
- **Catchment Plans and Farm Plans:** Two groups noted that they are investing in, or investigating the potential to invest in, the development of catchment-wide management plans, along with the mapping required as part of this, and improving access to information to increase the knowledge, appreciation and understanding of the cultural and historic values within an area. This was largely a 'work in progress' but there was a visible recognition of the importance of catchment-scale plans, which could then provide a foundation for Farm Environment Plans. Wānaka Catchment Group noted that considerable progress was being made on the adoption and ongoing implementation of their members' farm plans.
- **Soil health:** For catchment groups, soil health is an increasing focus – from erosion control, soil biology health, and the importance of minimising topsoil losses. Many groups were building on recent sector and council field days and the wider provision of information around improving Intensive Winter Grazing practices. For winegrowers, there was an increased awareness and focus on protecting and enhancing soil health through initiatives like the use of cover crops between vine rows to provide a protective layer for microbial communities, reducing the use of herbicides, and reducing the use of cultivation, with some adopting regenerative, organic and biodynamic practices.
- **Waste:** Some interviewees referenced progress around waste reduction and increasing the community's awareness of recovery and recycling programmes. This has also been a considerable focus for winegrowers, with their sector working towards zero waste by 2050, which they aim to achieve through the adoption of practices like organic waste diversion, smart

packaging design, increased recycling and composting, low density polyethylene plastic bags, label recycling, and improved packaging efficiency.

- **Climate Change:** because of the timing of interviews coinciding with work on He Waka Eke Noa (HWEN), comments on this area gathered strong feedback from some interviewees. Most were now aware of their GHG emissions “number”, largely as a result of work from their supply companies, or through the B+LNZ GHG calculator or Overseer. For winegrowers, this is also an area of growing interest. Central Otago vineyards typically have a higher CO2 footprint than other vineyards in New Zealand because of the increased distance from markets; however, their fertiliser and chemical use is lower than the national average.

Table 1: Current Actions and Progress by Rohe/FMU

Rohe or FMU	Riparian Protection & Enhancement ¹	Stock Exclusion	Bio-diversity ²	Water Quality ³	Efficiency of Water Use	On-Farm Water Storage	High Risk Activities i.e. IWG ⁴	Weed & Pest Control	Catchment Mgmt Plans & FEMP's	Soil Health
Upper Lakes Rohe	√		√	√			√	√	√	√
Dunstan Rohe				√			√		√	
Manuherikia Rohe	<i>Not Part of Catchment Stories Project</i>									
Roxburgh Rohe	<i>Not Part of Catchment Stories Project</i>									
Lower Clutha Rohe	√	√		√						
Catlins FMU	√	√		√						
Taieri FMU		√		√		√		√	√	
North Otago FMU	√		√	√						√
Dunedin & Coast FMU	√		√	√						√

¹Including riparian planting, seed propagation and erosion control of stream banks. ²Biodiversity including maintenance of biodiversity, restoration and protection of biodiversity values.

³Water quality includes monitoring of water quality, sampling, and knowledge of water quality drivers. ⁴Includes changes to deemed high risk activities arising from regulatory change.

6. Challenges

The challenges identified by groups and individuals interviewed had strong themes which emerged. These have been grouped into categories, as follows:

- **Participation and Engagement**
 - Maintaining resourcing: The biggest challenge raised across all groups was the **time, skills, expertise and input** needed to keep the groups going, with many struggling to recruit paid roles, leadership roles, or other key tasks. There was a general need for greater resources to assist with facilitation, administration and organisation of groups.
 - Importance of connection and engagement: Many groups talked of the challenges of **keeping people connected and engaged**, particularly during Covid19 lockdowns and restrictions, which generally meant less opportunity for in-person meetings or working groups, and a greater need to stay connected via Zoom/Teams, email and social media.
 - **Ensuring purposeful meetings**: A number of groups noted the need to minimise the number of 'meetings for the sake of meetings' given many farms were only one or two people operations, and that going off farm involved considerable planning and effort. It was felt that events needed to add value to catchment goals and farming businesses to be worthwhile, particularly given the price of fuel.
 - **Importance of trust**: It was noted that it does not take much to erode the trust that farmers and growers had with stakeholders and authorities. Recent Otago court processes were cited as evidence of this.

- **Volume and pace of regulatory pressures from both central and local government**
 - The **volume and pace of new and changing regulations** coming at farmers and growers was identified in all catchment group interviews, with many stating that this stress added significantly to their ability to cope with other day-to-day challenges.
 - It was also suggested that some requirements to have **consents**, in particular for environmental-good projects, were counterproductive and could deter progress on initiatives or change.
 - There was also a perception that **local and central government appeared to rush planning processes**, rather than focus on ensuring they were workable, and/or sufficient. It was considered that argument over poorly drafted rules resulted in the diversion of money, time, and resources away from achieving environmental gains.
 - It was felt that **regulatory ambiguity, and what were perceived as unworkable or impractical government regulations**, were leading to uncertainty, stress, apathy, and inertia in some farmers.
 - Concerns were raised with the **'moving of goalposts' by regulators**, and the introduction of new, or changed requirements and expectations, often before earlier rules had a chance to show effect. One interviewee noted that this *"discouraged investment in solutions or projects and took away clarity in where groups needed to spend their time and energy."*

- It was perceived that there was an **over-regulatory focus** of government (both central and local) and that this *“actually hinders the smart stuff from happening. It can be a distraction from progress, and disregards human nature and the need for social buy-in to achieve long-term change.”*
- One group mentioned that the **‘consent mindset’** can also be a distraction. Money and time often go into ticking boxes, versus seeking outcomes, change and solutions.
- It was noted that there was also a **lack of knowledge transfer and communication of applicable science** at the time plans or regulations were pulled together, and that there was a need to focus on solutions, not barriers.
- Most groups and individuals interviewed through this project urged central and local government to slow down the **pressure from regulations**; noting there was *“too much too soon”*. One individual asked that Council, *“let things play out before changing them”*.
- There was a concern raised by multiple groups that **regulation risked leaving communities behind**, and stifled opportunities for positive future changes, or otherwise risked perverse outcomes.
- The Tahakopa group expressed concern with the **draft National Policy Statement of Indigenous Biodiversity** and what the resulting restrictions would mean for an area like the Catlins, which has substantial biodiversity.
- Many minority land users (not associated with dairy, sheep, beef, deer, or arable farming) were frustrated that they sometimes end up **captured by rules and regulations not intended for them**, or not fitting their more unique circumstances.
- Many interviewees expressed their frustration at government and council submission processes in general and expressing **doubt about being listened to** or heard.
- Frustration over ORC’s Plan Change 7 process was expressed; including a suggestion that there needs to be *“better advice and support for participants of fast-tracked hearing processes”* made available.
- A common theme was that for lay participants, legal Resource Management Act processes can be an overwhelming and overly technical experience. Some individuals relayed experiences that not only deterred their future involvement in such processes, but also resulted in **physical and mental wellbeing concerns** following involvement in Council planning or consenting processes.
- It was also perceived that insufficient information and/or evidence was presented which supported the direction of rules, and regulations.
- That **consultation felt like a ‘tick box’ exercise**, and some referenced not only not feeling listened to, but also not being reported as having given feedback.

- That there has been both an **economic loss, and damage to relationships** as a result of some freshwater litigation and court processes – with reference to Fish + Game in particular,

“the massive increase in rules and regulations have taken away our ability to be master of our own destiny. At times we feel our treatment is no different to that of peasants in the Middle Ages”.

“A common misconception around environmental issues is that they will be solved by regulation alone. This is simply not the case”.

- **Restrictions on growth for some sectors**

- In water-short areas in particular, it was noted that while there was physical growth potential for some sectors, such as viticulture and cropping, these **could not be realised due to restrictions on consent terms** for water use under Plan Change 7, which wasn't sufficient to enable funding. It was considered a gamble to invest multi millions of dollars and not know if water could be accessed beyond six years; it was also noted that being constrained to water previously used made vineyard expansion difficult.

- **Funding and reporting**

- Many groups noted concerns with **gaps in funding**, which left areas like administration, communication, coordination, facilitation and other projects as ‘missed opportunities’.
- Most groups talked of the stresses associated with the **arduous nature of applying for on-going funding**, and ‘proposal fatigue,’ which left some feeling the process was “demoralising”.
- It was noted that requirements for **milestone and other reporting** back to funding providers was a huge commitment for many, with that time taken away from projects on the ground.
- Groups noted that **funding for many projects is not connected to project tenure** (short-term funding for long-term projects) and that often the scope of funding is unrealistically narrow, preventing agility to change direction or tasks associated as needs change.
- **Contestable funding** was also raised as an issue – noting that competing for funds undermines the collaborative approach encouraged. Open VUE gave the example that for them, successful funding bids often meant other equally worthy causes missed out.

- **A focus on negative barriers which is overpowering the positive opportunities**

- Concerns were expressed regarding a perceived **focus on barriers** – on what can't be done by farmers and growers rather than on what their opportunities are to become more resilient and future proof.
- Sometimes groups feel that the **change required is all too big and happening all at once**, and that this becomes too much for people. It is felt that people need help to find a path through the regulations and requirements that are upon them.

- **Urban disconnect and lack of understanding**

- A number of groups raised feeling stress associated with public or social media **anti-farming sentiments**. There was a feeling that work was needed to overcome the perception that farming and the environment were mutually exclusive. Interviewees felt that there was often very little understanding among the urban population of the variety of farming systems in New Zealand.
- It was noted that at times it **feels like one step forward and twenty back**, when one bad photo of farming on social media seems to undermine a year of good work on local and on-farm projects.
- Vegetable growers referenced frustrations that urban people did not seem to realise that **nitrogen and other nutrients were critical to growing food**; and that growers were not becoming richer each time produce increased in price at the supermarket.
- It was also suggested that there were probably more common values held around water quality between urban people, recreationists and the farming families who live by, rely upon, and utilise the waterways, than people realised. It was noted that **farming families equally treasure the land and water**, and also use it for fishing, swimming and aesthetic/recreational values.

- **Cost of living concerns**

- Both farmers and growers identified increasing concern with the **current state of inflation and rising costs**. It was noted that this impacted all parts of their businesses from fertiliser, fuel, energy costs and labour, through to food and other essential products.
- It was noted that as price takers, they were unable to pass on rising costs to consumers, meaning a **need to absorb additional costs, reduce casual labour inputs or take on more work** themselves (noted as often being 80-90 hours a week during key times of the year).
- Concern was raised around the fact that for a 3-year term **loan for irrigation infrastructure**, the interest rate had increased to 8.9%.
- Groups mentioned that **consenting in Otago can be both expensive and unpredictably variable**, and for many it was becoming over complicated, requiring significant external input.

- **Labour and volunteer pressures**

- Both farmers and growers noted that **many are family businesses**, often with an inability to take on full-time labour support, particularly given the cyclical nature of seasonal work. This meant a greater reliance on sufficient seasonal or casual staff, and typically increasing pressure on the business owners to take on more work themselves.
- It was also commented that there is **significant pressure on catchment group volunteers**, and given the workload already on leaders, there is a disincentive for others to step up to take on volunteer leadership roles.
- It was noted from most catchment groups that there are significant **increasing demands on catchment leaders'** time from external groups and projects and that this often makes

them feel unvalued. It was noted that there is a risk of turning the catchment groups from being 'ground up' to becoming top down, or sideways across.

- **A need to balance farmer and grower time and focus**
 - It was commented that, *“the average farming family is very busy and is being pulled by many focusses – kids sport, family time, the need for recreation/downtime, stock management, animal welfare, financial viability, fertiliser management, agronomy projects, building maintenance, weed control, health & safety, GHG emissions, winter grazing management, environmental management, national, regional and district plan rules, employment & tenancy laws, access considerations, tourism opportunities, relationship with DoC, LINZ & pastoral lease management, water system development, mental health protection, irrigation management, just to name a few. This means that while everyone has bought into the need for environmental improvements, the reality is that at any given time it sits anywhere between #1 and #15 in people’s list of priorities and therefore it is hard to get engagement/progress all the time – the focus has to be on getting done what we can when we can.”*

7. Key Learnings or ‘Advice’

Each group had points they thought would be useful to share with other groups, and viticulture in particular, noted their interest in open sourcing their learnings.

Some of the common learnings that came through included:

- **Each group is different** – what works for one group, will not necessarily work for others.
- **Operate at the right scale** for your needs – a number of groups preferred having a smaller group that is connected to the area, who know each other and therefore work together better.
- **Be outcome focussed** and try to keep focus on the journey and keeping everyone on board to progress and improve rather than being distracted by (input) metrics – e.g. ‘events held’ ‘percentage of catchment involved’.
- **Set short-term goals as well as long-term ones:** noting that small successes along the way help to ensure participants stay motivated and keeps them on the journey to long-term goals and visions.
- **Make sure goals are achievable** and recognise that groups cannot do everything all at once: Multiple groups raised the point that trying to achieve everything, simultaneously, risks spreading the effort of the group too thin, which de-motivates members when successes are hard to come by.
- **Focus on what is feasible - don’t try to please all the people all the time** (both within and outside the group). That groups cannot please everyone and that those who do not agree with the messaging or journey will eventually follow or otherwise absorb the need to change. That the social lift (improvement in what the community sees as normal or acceptable) will bring those who might initially be more reluctant along.

- **Be considerate of people's time:** It was noted that catchment group leaders often feel bombarded with phone calls, webinars, working groups, meetings and requests for 'help' or information, including from consultants doing work for Council (e.g. this project). It was felt that the time of leaders, in particular, was not duly recognised or valued, and usually no koha was offered to groups in exchange for the time they had given.
- **Seek support with administration:** Having someone funded to provide administrative support to coordinate and support projects within a group really helps.
- **Have a strong steering group,** with the right set of skills around the table.
- **Use face to face engagement when this is possible:** Numerous interviewees noted that post-Covid 19 lockdowns, a lot of webinars, meetings, workshops and requests for information or feedback became 'online' (understandably), but that outside critical need times (like lockdown), face to face meetings are still really important to get better interaction and engagement. Some key examples given:
 - *"The need to have a chance to debrief, chat, vent or share learnings after a meeting over a coffee/tea/beer/biscuit or sausage!"*
 - That often online meetings are in the evening and people go to bed afterwards with stress, uncertainty or angst in their heads and no chance to talk it through with anyone.
 - That many people are not comfortable asking a question during an online session, but if in person, they could quietly raise it afterwards, one-on-one.
- **It is important to work with schools:** Most the groups and interviewees talked of the importance of working with local schools, noting that they are a great connection to wider communities.
- **Don't get caught up in the hype** about other groups – a point was made that every group is struggling to achieve their goals, and that the stories groups hear about often don't represent the realities on the ground.
- **Don't employ a whole lot of people for the sake of it** – it was noted that more people often mean more complications, not necessarily more progress.
- **Recognise that you cannot force succession:** it was noted that catchment groups should not over-obsess about bringing in new people, younger people, more leaders, more facilitators etc. That success is having the right people there that drive that success, and that you cannot force that.
- **It is important to support leaders** socially, technically, and financially.
- **Understanding and defining progress is important.** Success is often simply the movement in the right direction and is reaffirmed by continued overall improvements. Enduring progress is not possible overnight, and often a focus on achieving subtle social change, social buy-in, and the sharing of knowledge best ensures longer term success.
- **Use a variety of tools/approaches** and provide for integrated conversations.
- **Have a strategic plan, and/or common visions and values.**

- **Have a commitment to retaining a ‘ground-up’ ethos**, rather than a top-down regulatory focus.
- **Having a facilitator can be helpful** – otherwise there can be the frustration of “*herding cats*” and volunteers typically lack the time to be able to achieve this.
- **Be patient and compassionate**, as this is an intergenerational challenge.
- **Working with Council:** There were many instances provided of good engagement with ORC staff and councillors across the groups. However, some concerns raised were:
 - That it can often be difficult to access the right department or get continuity of personnel engaged in groups/projects, given turnover.
 - That there is inconsistent messaging depending on which staff member or team is talked to – including as to costs or complexity of consents.
 - That Council staff are busy so when they come to meetings they often have to leave immediately after talking, so do not hang around for a coffee/tea, which people felt was a missed opportunity to talk with people and respond to questions that may not have been comfortable to have asked in a group session.
 - Lack of communication within ORC has meant that staff were not necessarily aware or able to talk about what each other was doing or who to contact for questions in other teams.

8. What Does Success Look Like?

There was a strong consistent theme across all groups and individuals spoken to around the **importance of achieving their goals and objectives around environmental outcomes, while retaining viable, resilient businesses and thriving communities.**

Primarily, success was noted to be about **continuous improvement** from all (or most) group members – and the satisfaction of seeing people changing mindsets and behaviours, increasing their knowledge and awareness, and continuing to chip away at making progress e.g. fencing off areas, excluding stock from waterways, and adopting changes to practices.

Another consistently raised theme was the importance of groups **providing members with support**, both from each other, and through accessing external advice, support and information as and when needed. The Lake Wakatipu Catchment Group sought to ensure their members understood and engaged with regulatory processes to enable them to feel less scared or daunted, so that they could continue to learn from each other’s successes and failures.

Most groups and individuals also mentioned success being the need to **have an engaged and interested catchment community, with high participation rates, working constructively** on solutions, and generally buying into being part of solutions.

Broader community engagement was another area that groups were keen to continue to build on. All groups spoken with had connections to local schools, and this was on most agendas to continue to develop and value.

A couple of groups raised the need for **success to be able to relate to both the big and little things** (short-term and long-term goals). It was noted that being able to appreciate how much they have achieved over the years is important.

Many groups have critical stakeholder or external input and valued this. Comments were made on 'success' being building on that, and **developing relationships and connections with mana whenua**, and **developing consistent connections with ORC**.

Some groups had very specific views of success for relating to the goals of their group. For example:

- The Upper Taieri group was aiming in the short-term for a “pragmatic” management plan for the greater scroll plain.
- In the Kyeburn, the short-term focus was on ensuring all consents conditions are complied with, while continuing to work together collaboratively as a group. They also put a strong focus on rebuilding relationships and trust with certain stakeholders.
- For the Friends of Lake Hayes, a key success is a commitment from ORC towards greater, and improved science – including a continuous log metering of turbidity, nitrogen, temperatures and dissolved oxygen to get a better understanding of annual pollution loads.

9. Possible Next Steps

As the project proceeded, a number of catchment groups who had not initially been involved expressed a late view of being open to having their views captured. Due to time constraints, and then a clash with lambing, these subsequent interviews have not occurred. A potential next step could be following up with a second round of interviews with those groups.

A key part of the project is to feed into the Economic Impact Assessment, and the wider industry work in this space. This report is the second report in a series which will feed into the EIA.

Report findings and key 'learnings' can also be extended to ORC Catchment Advisory facing staff, and to the Otago Catchment Community. In addition learnings can be fed into ORC's Catchment Action Planning programme as it develops.

The material collected is also a resource for each group and for ORC, both in the short and potentially, the long term.

- The material relating to each group will be provided to each group as a record, which they can reflect on and perhaps use as a benchmark to help measure progress over time.

- For ORC there is also the potential to use it as a measure of the “state of catchment groups” (pre catchment action planning), with a view to repeating the exercise (or similar) in a number of years to assess whether there has been change.
- It could also be used to communicate to the general public (of which the majority are urban) about what catchment and other groups are doing in Otago. This might help improve understanding and address the rural-urban divide, which is identified in the report as an issue for Otago. Some of the material could be linked to a map and made available, for example on the ORC website. However, it is important to note that nothing further will be done with the material collected without the permission of each group.

1. Appendix – List of Groups Interviewed

East Otago
Friends of Lake Hayes
Glenorchy
Kyeburn
Lake Wakatipu
Lake Wānaka
Leith Valley – a Dunedin Urban group
Maungawera Valley
Tahakopa
Tiaki Maniototo
Upper Taieri
Vegetable growers
Waianakarua
Winegrowers

Other groups contacted that offered inputs or commentary and/or expressed interest in future discussions:

Cardrona
Coal Creek
Lindis
Lower Taieri
NOSLaM
Owaka,Toko
Waitahuna.