



FOREWORD

Our Co-operative is committed to caring for New Zealand's waterways, ensuring dairying works in harmony with natural habitats and ecosystems of healthy, living water.

The dairy industry depends on healthy freshwater systems and we are committed to working with our farmers, communities and others in the primary sector to develop sustainable solutions for improving and maintaining the health of New Zealand's waterways.

Our Living Water programme with the Department of Conservation is an important part of Fonterra's long-term commitment to responsible dairying.

Our shared vision for the partnership is that a sustainable dairy industry is part of healthy, functioning ecosystems that together enrich the lives of all New Zealanders.

It is a challenging aspiration and one we believe we can deliver on.

It means taking an expansive, long-term view of dairy farming and its effects on New Zealand's natural resources and not only reducing environmental impacts, but exploring ways to enhance biodiversity and the strength of our ecosystems.

Our farmers are making great progress and we know that working together with communities will achieve more in the long run than if we were going it alone.

Making a real difference will take time but I am confident that Living Water, in combination with all our work in sustainable dairying, will deliver improvements to New Zealand's streams, lakes, rivers and wetlands.

Theo Spierings Chief Executive Officer,

Fonterra Co-operative Group Limited

The Department is working with the agricultural sector to grow conservation by working in partnership with others. A focus on sustainability benefits ecosystems, businesses, communities and the economy.

Working with Fonterra is one of a number of critical key business partnerships for the Department.

Together, the two organisations can demonstrate that the application of robust ecosystems and pastoral science can improve natural condition while maintaining farm profitability. We are happy to share in this report some of the lessons we have learnt from developing the partnership.

I have had the opportunity to visit some of the sites that have been chosen for Living Water and I have been impressed by the enthusiasm of the farmers, community leaders, iwi and staff I have met.

There are high expectations for the projects and I am confident that the preparatory work that has been undertaken in this first year will lead to cost-effective targeted actions in future years. Some of the issues are complex but, with the goodwill of the participating farmers and the support of iwi, councils and the community, positive outcomes will be achieved.

The start-up projects to date have already demonstrated a mix of practical achievement and collaborative research that augurs well for the future.

We look forward to the results of this work, and to the new techniques developed being shared more widely with farmers and conservationists throughout New Zealand.

Director-General, Department of Conservation



ABOUT LIVING WATER

Signed in 2013, our 10-year \$20 million partnership agreement is focused on improving water quality and biodiversity at five significant catchments near Fonterra farms and factories. These five areas have special value for all New Zealanders. Living Water is working at specific sites within these areas.



OUR PROGRESS

Fonterra and the Department of Conservation (DOC) have a common interest in protecting New Zealand's waterways and recognise that quality water from healthy ecosystems underpins New Zealand's environmental health, community wellbeing and economic prosperity. DOC's conservation expertise combined with Fonterra's on-farm environmental programme and the support of farmers, iwi, councils and environmental care groups will provide working examples of our programme vision.

Our guiding Living Water principles underpin all our actions ensuring the programme is operated with integrity:

- Achieve a positive and measureable impact on water quality and biodiversity.
- engagement and value with our communities.

Our Key Performance Areas provide a framework for our projects:

- Achieve biodiversity and water quality improvement. • Work in partnership with
- Develop environmental sustainability on and off farm.
- · Work in partnership with iwi.
- stakeholders, landholders and community.
- Share our story.

Living Water Activity

During our first 16 months, we have focused on setting up an enduring programme to achieve biodiversity and water quality improvements through practical community solutions. Key programme activity has included:

- Establishment of programme scope, vision, governance and working groups.
- Fostering close working relationships with key stakeholders including farmers, iwi, councils and environmental care groups to identify specific conservation projects that support, complement or enhance existing projects.
- Implementation of 16 diverse start-up projects, which achieve widely accepted benefits, find essential site information, or trial new management techniques.
- Development and implementation of our three-year National Communications and Engagement Plan.
- Development of Annual Site Operational Plans.

Our Structure and Governance

We have jointly developed a shared programme structure and governance. This has included the appointment of a Steering Committee, Technical Working Group, Communications Working Group, National Programme Management team and Regional Project teams.

Our Fonterra farmers are critical to the success of Living Water, particularly farms that are within the relevant catchments. Farmers are providing leadership, advice and guidance across all aspects of the partnership including generating ideas, developing operational plans, robustly assessing the validity of projects and ensuring the money is well spent.

Membership of the governance groups includes Fonterra employees and farmer representatives as well as Department of Conservation employees.

Our Approach

Across all our focus sites, there are a number of dedicated organisations and people already undertaking conservation work and we acknowledge and recognise this great work to date.

We have been talking with our local communities, including our Fonterra farmers. to understand where the partnership will be able to add the most value. In doing so we have identified specific projects that support, complement or add value to existing projects.

We recognise and respect the important role of tangata whenua as kaitiaki of the waterways. Through Living Water we are working closely with local iwi/hapūto support their aspirations for these sites.

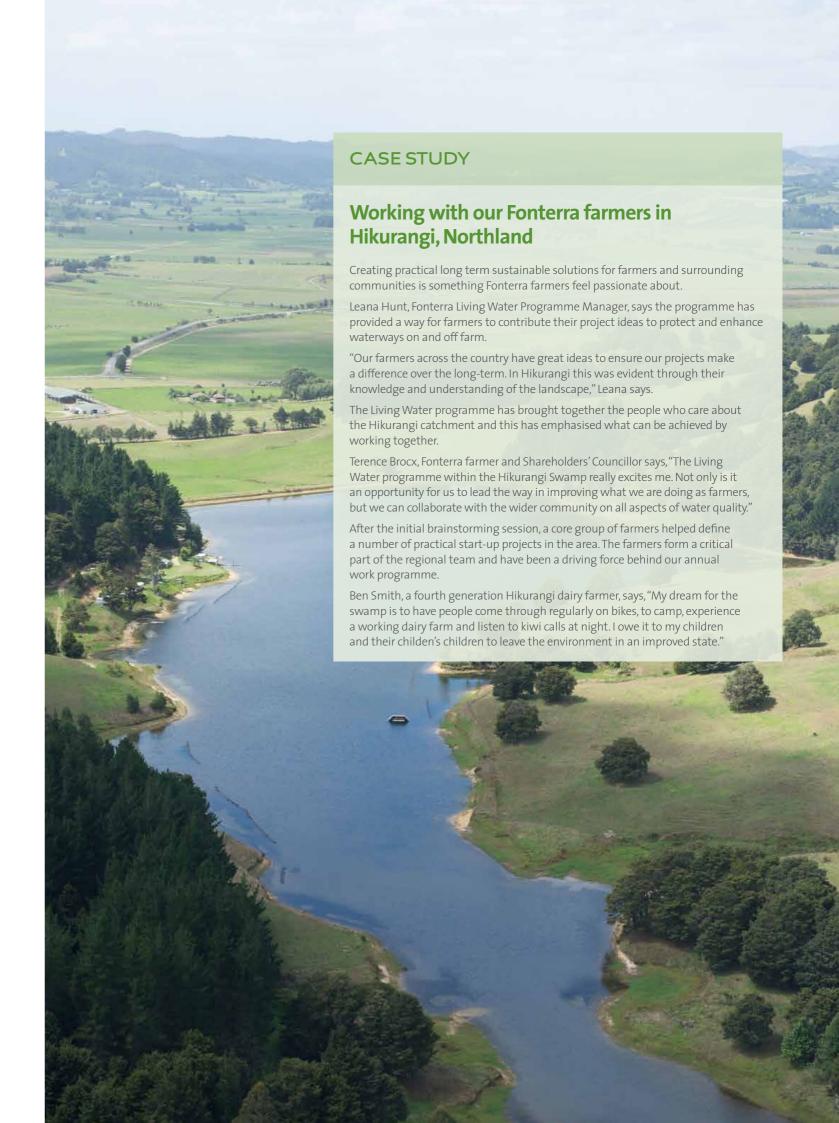
Working together with our communities means we will achieve more than we would if we were working alone. Making a real difference takes time and requires long-term commitment. That's what Living Water is all about.

Our Expenditure

Fonterra has committed \$2 million per year to be paid to the Department of Conservation over 10 years. The \$20 million is held in trust and only drawn down as activities are approved by the Steering Committee. As any unspent funds are carried over year on year, this ensures projects are robustly assessed to ensure our long-term objectives are achieved.

Significant investment has been made in developing a shared programme structure, including governance, working groups, systems and processes as well as fostering close working relationships with key stakeholders in our focus sites.

Great progress has been made to date through our start-up projects however, expenditure for a number of these projects will be realised in 2014/15 financial year. Our 2013/14 expenditure was \$230,184. This was supported by additional resources from both organisations to design and implement Living Water.



KAIPARA HARBOUR

Hikurangi catchment, Northland

After talking with our local community, we identified five start-up projects in Hikurangi and the wider Kaipara for 2013/14. These projects showcase best practice, show our commitment to working with already established groups and begin the collection of baseline data necessary to underpin future decisions on our investment.

BASELINE WATER QUALITY MONITORING

Collation of existing research and monitoring within the Hikurangi catchment to identify whether additional monitoring is required to meet Living Water objectives and outcomes.

- · Report summarising current water quality monitoring framework.
- · Gap analysis and recommendations for additional monitoring.
- Report back workshops for farmers and wider stakeholder group.
- Agreement by key stakeholders on delivery of recommended additional monitoring

PROGRESS TO DATE

- ✓ Report and recommendations completed.
- ✓ Report back meetings held.

✓ Discussions with stakeholders and Fonterra farmers on delivery of suggested additional monitoring under way.

• Site management actions jointly

developed with key stakeholders.

Collection of baseline data to measure

change created by the Living Water

BEST-PRACTICE RIPARIAN PLANTING

Showcase best-practice riparian planting in a flood-prone area which over time will encourage other landowners to undertake similar projects on their properties.

OUTPUTS

- Planting plan and 200 metres of riparian planting alongside a farm drain using appropriate eco-sourced native plants.
- Fonterra and DOC employees to assist landowner with planting and build relationship and appreciation of Living Water.
- · Photo points to track changes established.

OUTCOMES

OUTCOMES

programme.

- Farmers achieving demonstrated improvements in on-farm sustainability indicators.
- The community and Fonterra/DOC employees participating in conservation and sustainability management at the site.

PROGRESS TO DATE

- ✓ Planting plan completed.
- ✓ Plants sourced, delivered and planted by landowner. DOC and Fonterra

SUPPORT IKHMG SYMPOSIUM

Me huri whakamuri ka titiro whakamua Kaipara Moana – Looking Back... Thinking Forward (Nov 2014)

The symposium provides a forum for farmers, scientists, government, industry, iwi and hapū as well as NGOs to share their expertise and experience in collaborative catchment management.

OUTPUTS

• Successful symposium held.

• Future Living Water projects and opportunities for collaboration discussed with key stakeholders

✓ Donation/Koha provided to IKHMG.

OUTCOMES

 Living Water and the Fonterra/DOC partnership seen as key contributors to the development of best practice in water quality and biodiversity enhancement.

PROGRESS TO DATE

✓ Living Water presence at symposium

FONTERRA FARM LEADING

BY EXAMPLE Helping the Jordan Valley Fonterra farm to support the IKHMG flagship farm programme.

OUTPUTS

- Jordan Valley farm commitment to best
- · Jordan Valley farm complements broader IKHMG programme.

OUTCOMES

 Farmers achieving demonstrated improvements in on-farm sustainability indicators.

PROGRESS TO DATE

✓ A farm environment plan has been undertaken with a more comprehensive biodiversity assessment.

✓ Activities to be agreed and progressed during 2014/15.

VOLUNTEER SUPPORT

for the Integrated Kaipara Harbour Management Group (IKHMG) flagship farms

Volunteer support provided through Conservation Volunteers New Zealand (CVNZ) for flagship farms within the Kaipara. This builds on the support initially provided through the Fonterra Catchment Care programme.

OUTPUTS

· Eight weeks volunteer support provided. Five weeks at IKHMG flagship farms to support riparian planting initiatives and three weeks allocated specifically for the Hikurangi catchment.

OUTCOMES

- Biodiversity improvement at sites.
- Community participates in conservation and sustainability management at the sites.

PROGRESS TO DATE

✓ Project completed.



TĪKAPA MOANA/FIRTH OF THAMES

Pūkorokoro/Miranda catchment, Tīkapa Moana/Firth of Thames

After talking with our local community, we identified two start-up projects in Pūkorokoro/Miranda for 2013/14. These projects assess the hydrology of the Miranda stream mouth and opportunities for ecological restoration in the catchment.

HYDROLOGICAL ASSESSMENT

Evaluate the potential impact of modifying the Miranda stream mouth to provide additional high-tide roosting for migrant shorebirds.

OUTPUTS

 A report assessing feasibility of constructing high-tide roosting ponds and recommendations.

OUTCOMES

- Baseline information on hydrology of Miranda stream mouth to inform future decisions on habitat restoration options that will not impact detrimentally on farming.
- Site management actions jointly developed with key stakeholders.

PROGRESS TO DATE

✓ Report completed and presented to key stakeholders, including farmers.

Agreement to undertake further hydrology assessments and investigate potential purchase of private land.

EVALUATION OF OPPORTUNITIES FOR ECOLOGICAL RESTORATION

Collation of existing information and assessment of the current values and opportunities for ecological restoration along the Shorebird Coast part of the Pūkorokoro/Miranda catchment.

OUTPUTS

• Report evaluating restoration management requirements at Pūkorokoro/Miranda.

OUTCOMES

- Establish a baseline of current state to measure change created by the Living Water programme.
- Restoration of existing habitat, increased available habitat for key species and increased biodiversity.
- Iwi, hapū, whānau partnerships developed and strengthened.
- Site management actions jointly developed with key stakeholders.

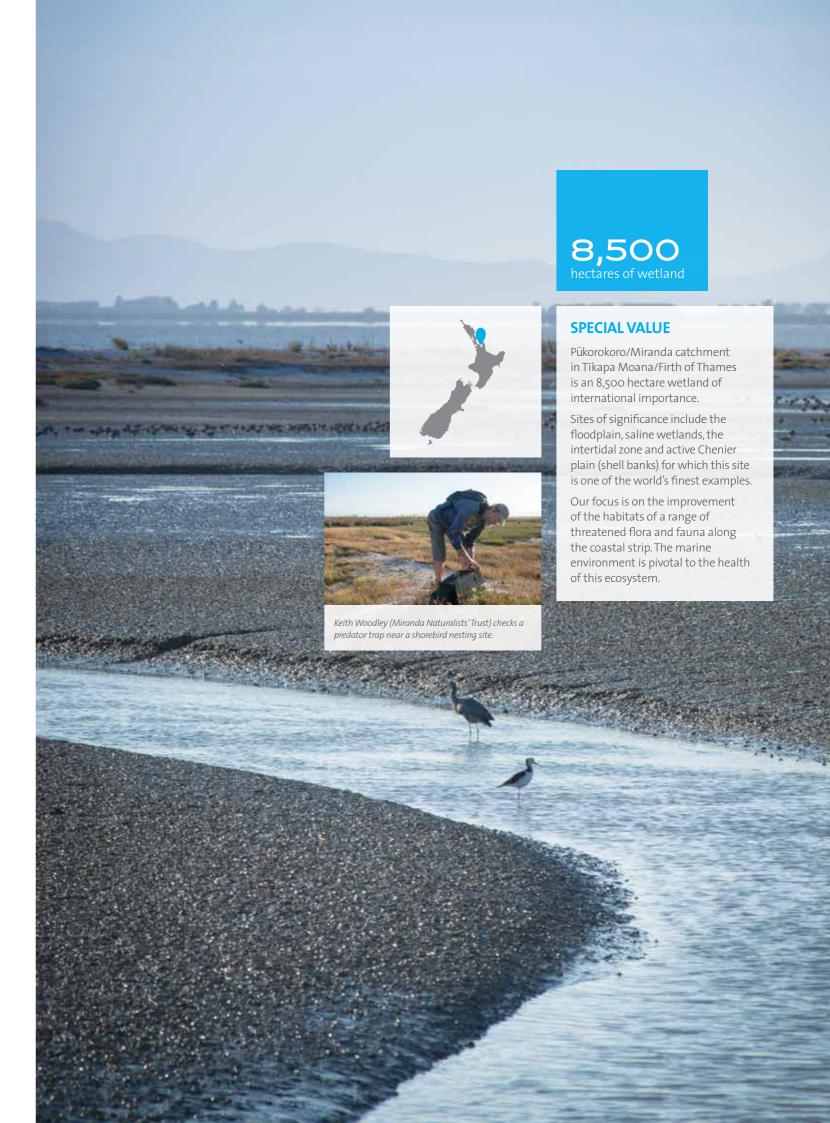
PROGRESS TO DATE

✓ Report completed and presented to key stakeholders.

Prioritisation of suggested projects under way.



Gary Dalton (Fonterra farmer and Te Whangai Trust founder) gives his views on Living Water priorities to John Gumbley (DOC).



WAIKATO PEAT LAKES

Lakes Areare, Ruatuna and Rotomānuka, Waikato

After talking with our local community, we identified three start-up projects in the Waikato for 2013/14. These projects help establish baseline information, trial a nursery and training platform and support existing projects and groups.

BATHYMETRY MAPPING

Lake bed depth and contour maps for Lakes Areare and Ruatuna

There are no bathymetry maps available for Lakes Areare and Ruatuna. These maps will establish a baseline, guide the selection of proposed water quality monitoring stations and provide information for future investigations.

PILOT NURSERY AND TRAINING PLATFORM

Scoping of a nursery and training platform at the Te Rapa Fonterra farm in partnership with Te Whangai Trust. The Trust supports, trains and advocates for those people who find it challenging to enter the labour market. There is potential to accelerate environmental enhancement in New Zealand by developing nursery capacity, and growing and supplying quality eco-sourced native plants and trees for defined catchments.

VOLUNTEER SUPPORT FOR THE WAIKATO LAKES

Volunteer support provided through Conservation Volunteers New Zealand (CVNZ) for the maintenance of existing riparian plantings across the Waikato Lakes. This builds on the support initially provided through the Fonterra Catchment Care programme.

OUTPUTS

· Report showing bathymetry of the lakes.

OUTCOMES

- Establishment of baseline data to measure changes to lake depths during the Living Water programme.
- Site management actions jointly developed with key stakeholders.

PROGRESS TO DATE

✓ Bathymetry report completed.

OUTPUTS

- A Te Whangai Trust nursery and training platform at Te Rapa Fonterra farm established.
- Supply of competitively priced plants for biodiversity enhancement and water quality improvement projects across the Living Water Waikato peat lakes catchment within 12 to 18 months of establishment.

OUTCOMES

- Maximise amount of biodiversity enhancement and water quality improvements.
- lwi, hapū, whānau partnerships developed and strengthened.
- Business and employment opportunities developed.
- Farmers accelerating projects on their land through cost effective planning, advice, plants, labour supply and maintenance.

PROGRESS TO DATE

Discussions with Te Whangai Trust have led to the development of a proposal for the establishment of a pilot nursery and training platform.

Ten days of volunteer support provided for

riparian planting maintenance across the

✓ Proposal to be considered by Living Water governance committees.

OUTCON

- Biodiversity enhancement including improved survival of plantings at sites.
- Community participating in conservation and sustainability management at the sites.

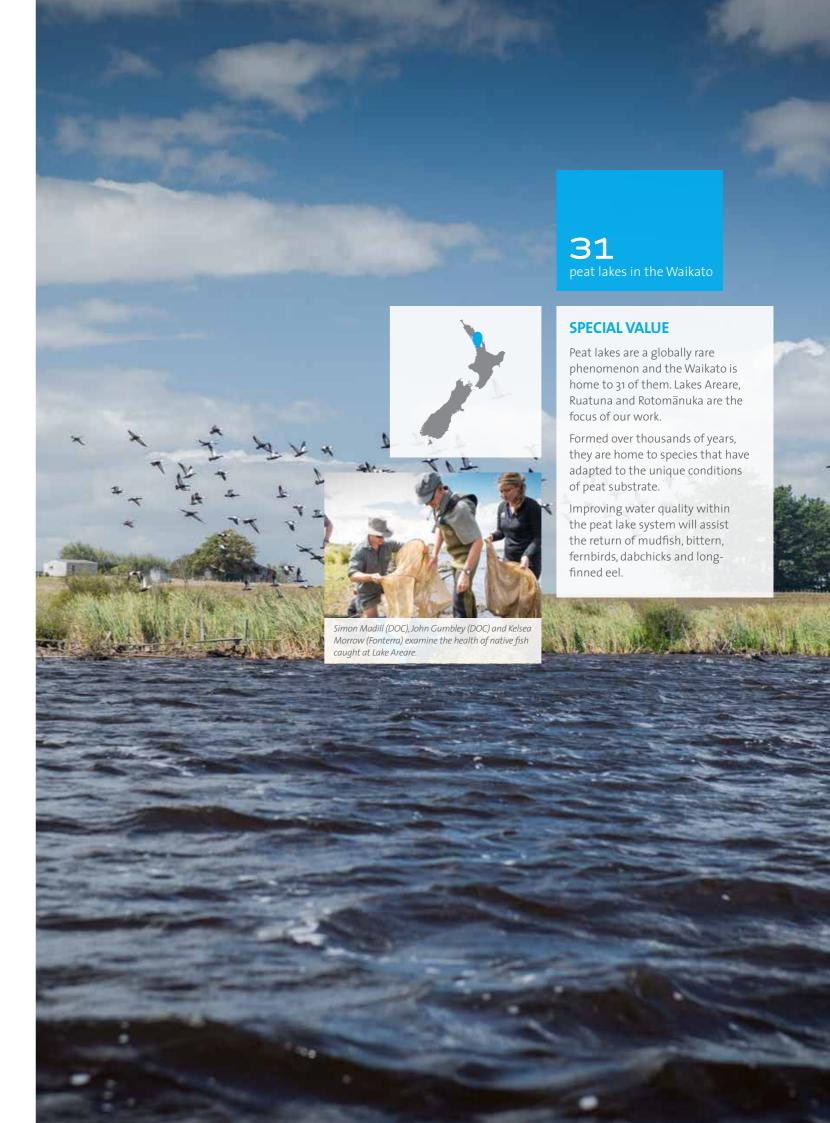
PROGRESS TO DATE

Waikato peat lakes.

✓ Project completed.



Charles Anainga (Public Trust Farm sharemilker), Tim Brandenburg (Fonterra) and Tracie Dean-Speirs (Waikato Regional Council) discussing Living Water opportunities at Lake Ruatuna.



TE WAIHORA/LAKE ELLESMERE

Silverstream catchment, Te Waihora/Lake Ellesmere, Canterbury

After talking with our local community, we identified one start-up project in Te Waihora for 2013/14. The drain rehabilitation trial is being carried out by Canterbury University's Freshwater Ecology Research Group (FERG) with Mackenzie Foundation funding and is supported by Living Water.

DRAIN REHABILITATION TRIAL

A partnership with Canterbury University for a multi-year drain rehabilitation trial on Fonterra farmers Richard and Jill Simpson's farm. The trial is aimed at developing techniques to enhance the benefits of riparian fencing and planting. The project is also supported through Mackenzie Foundation funding.

- Community planting day.
- Scientific study on benefits of alternative drain management.

OUTCOMES

- · Improved riparian management.
- Improved water quality by reduction of instream nitrogen and phosphorous levels.
- Improved in-stream habitat achieved by removing sediment inputs and some sédiment legacy.
- Improvement of in-stream habitat by addition of riffles and pools.

PROGRESS TO DATE

- ✓ All fencing complete.



Chris Stewart (DOC), Maggie Bayfield (Canterbury University) and Nicola Toki (Fonterra) survey current restoration progress at Silverstream drain.



AWARUA-WAITUNA

Waituna catchment, Awarua-Waituna, Southland

After talking with our local community, we identified five start-up projects in Awarua-Waituna for 2013/14. These projects work in partnership with others, support existing projects and groups, create new assessment approaches and trial new management techniques.

RIPARIAN AND IN-STREAM HABITAT ASSESSMENT

A partnership with Cawthron Institute to develop a riparian and in-stream habitat assessment for the whole of the Waituna Lagoon catchment, including Waituna, Carrans and Moffat Creeks. This will identify priority sites and inform where cost-efficient management actions are needed.

OUTPUTS

· Report on in-stream habitat.

OUTCOMES

- All creeks to have their in-stream habitats mapped for further management application.
- Site management actions jointly developed with key stakeholders.

PROGRESS TO DATE

EEL (TUNA) HABITAT QUALITY INDEX

A partnership with Cawthron Institute to develop an eel (tuna) habitat quality index. Other key local participants within the programme include DairyNZ, Environment Southland, Fish & Game New Zealand, Te Ao Mārama and eel (tuna) fishers.

OUTPUTS

- Community volunteers completing training.
- Indices report on habitat quality for eel (tuna).

OUTCOMES

- Community participating in conservation and sustainability management at the sites.
- Traffic-light approach to assessing current in-stream habitat quality for eel (tuna) and recommendations for management to improve if necessary.
- Iwi, hapū, whānau partnerships developed and strengthened.
- Site management actions jointly developed with key stakeholders.

PROGRESS TO DATE

✓ Project due to be completed in November 2014.

CONSTRUCTED WETLAND PLANTING SUPPORT

A pilot trial to design and construct a wetland as an extension of an existing duck pond has been funded by the Ministry for the Environment's Fresh Start for Freshwater Cleanup Fund, for Environment Southland. This will demonstrate the applicability and efficacy of converted small-pond wetland systems to reduce nutrient and sediment loading to the Waituna Lagoon. Living Water is funding the establishment and initial maintenance of the plants.

OUTPUTS

- · Native planting of constructed wetland.
- Demonstration wetland.

OUTCOMES

- Planting of the wetland will assist in surface water run-off and retain sediment. In addition, the in-water planting of reeds will reduce nitrogen levels.
- Community, Fonterra and DOC employees participating in conservation and sustainability management at the site.

PROGRESS TO DAT

Planting due for completion in November 2014, led by Environment Southland and supported by Living Water.

PASSIVE FILTERS TO REDUCE NITROGEN AND PHOSPHORUS LOADS TO WAITUNA LAGOON

A partnership with NIWA and DairyNZ to design, apply and assess the performance of two passive treatment filter systems to reduce nitrogen and phosphorus loads associated with agricultural tile drain discharges. The project is also supported through DairyNZ and NIWA funding.

OUTPUTS

- Report on the effectiveness of sorption filters on tile drains.
- Factsheet on design of treatment tools to assist further implementation by farmers.

OUTCOMES

- Potential new tool to address nitrogen and phosphorus loss in the catchment.
- If the trial is successful, filters will be able to be used by farmers to achieve demonstrated improvements in on-farm sustainability indicators.

PROGRESS TO DATE

- ✓ Sites identified
- Key milestones and timeframes finalised including development of loading criteria, construction of field scale systems, flow monitoring and sampling, interim report on system design.

VOLUNTEER SUPPORT

for Craws Creek, The Carrans/Little Lagoon and Waituna Creek

Volunteer support provided through Conservation Volunteers New Zealand (CVNZ) for the maintenance of existing riparian plantings in Waituna. This builds on the support initially provided through the Fonterra Catchment Care programme.

OUTPUTS

 Twenty days of volunteer support provided for riparian planting and maintenance in Waituna, including assisting with Waituna Landcare Group's reserve and maintenance on covenanted areas on private land as well as public conservation land.

OUTCOMES

- Biodiversity improvement including improved survival of plantings at sites.
- Community participating in conservation and sustainability management at the sites.

PROGRESS TO DATE

✓ Project complete.



OUR TOP FIVE TIPS FOR CREATING SUCCESSFUL PARTNERSHIPS AND JOINT PROGRAMMES

Lessons Learned

Both DOC and Fonterra recognised that working together we could achieve more than working alone, and began discussions about a partnership programme two years prior to signing our agreement. It was incredibly important that the partnership was set up with longterm success in mind.

At times, it has been challenging bringing together two different organisations with different backgrounds and heritage, and sometimes differing perspectives. Yet together we have worked hard to find common ground and create a shared programme, Living Water, which we believe can make a real difference.

The lessons we have learned are not unique to our organisations and may be useful for others to use when embarking on partnerships of their own.

If you would like more information and to share your experiences please contact us at livingwater@fonterra.com

1. Find your common purpose

- · Understand each other's vision, goals, strategies and reasons for entering into discussions.
- Engage thoroughly to ensure differences of opinion can be discussed and agreements made.
- Agree upon a common programme vision, and on common objectives and scope (multiple discussions, throughout multiple layers of each organisation will ensure this is robust).
- Lead from the top. At the same time, programme principles and design will be much stronger if the people who will be involved in the programme are consulted during the initial stages.

2. Be realistic

- Disagreements will happen. Have a clear understanding of the programme scope and the process for dealing with disagreements outside of this scope. For example, the Living Water Agreement contains specific clauses to ensure both parties can voice differing opinions on issues and that the Agreement does not constrain the partner's wider societal, business or environmental responsibilities.
- · Recognise it takes time to build relationships and create trust.

3. Create 'one team'

- Create 'one team' for the purpose of the programme. Meet regularly, understand each other as individuals, agree common ways of working, create joint governance and decision-making processes.
- Do not underestimate the time required to build the programme well from the
- Create opportunities for employees to learn more about each other's respective organisations outside of the specific programme.
- Understand the journey does not end once the Agreement/Contract is signed. The relationship needs constant nurturing to grow and develop – this includes frank discussions, sometimes apologies, a positive attitude, and the belief that you common goals and will proactively look for solutions and opportunities to create a robust working relationship/partnership.

4. Ensure clear documentation

- An Agreement/Contract should clearly articulate roles responsibilities and programme purpose. This becomes the central reference document for the programme. For example, the Living Water Agreement provides ground rules for the ongoing partnership and the projects to be implemented. Summarised excerpts include:
- > Parties are committed to building a constructive relationship.
- > Parties are free to express different points of view.
- > Projects will deliver measurable change over and above that required through any regulatory requirement.
- > Projects will make measurable, positive community and environmental

5. Acknowledge complexities

- With any environmental programme there are multiple layers of complexity: from management of multiple objectives to collaboration with multiple stakeholders with existing projects as well as working with the uncertainties of ecological, farming and catchment complexity. Critical to working through these complexities is:
- > Having key capability available in both organisations to provide their expertise.
- > Acknowledging collaboration is a long game that may require you to take extra time to explore the views of others and adopt a more flexible approach to delivery.
- > Ensuring planning is comprehensive but that it does not impede progressing work on ground. Flexibility to adjust planning and activities is required as more information becomes
- > Recognising you may not always get it right first time but by developing comprehensive systems you will learn from any setbacks.

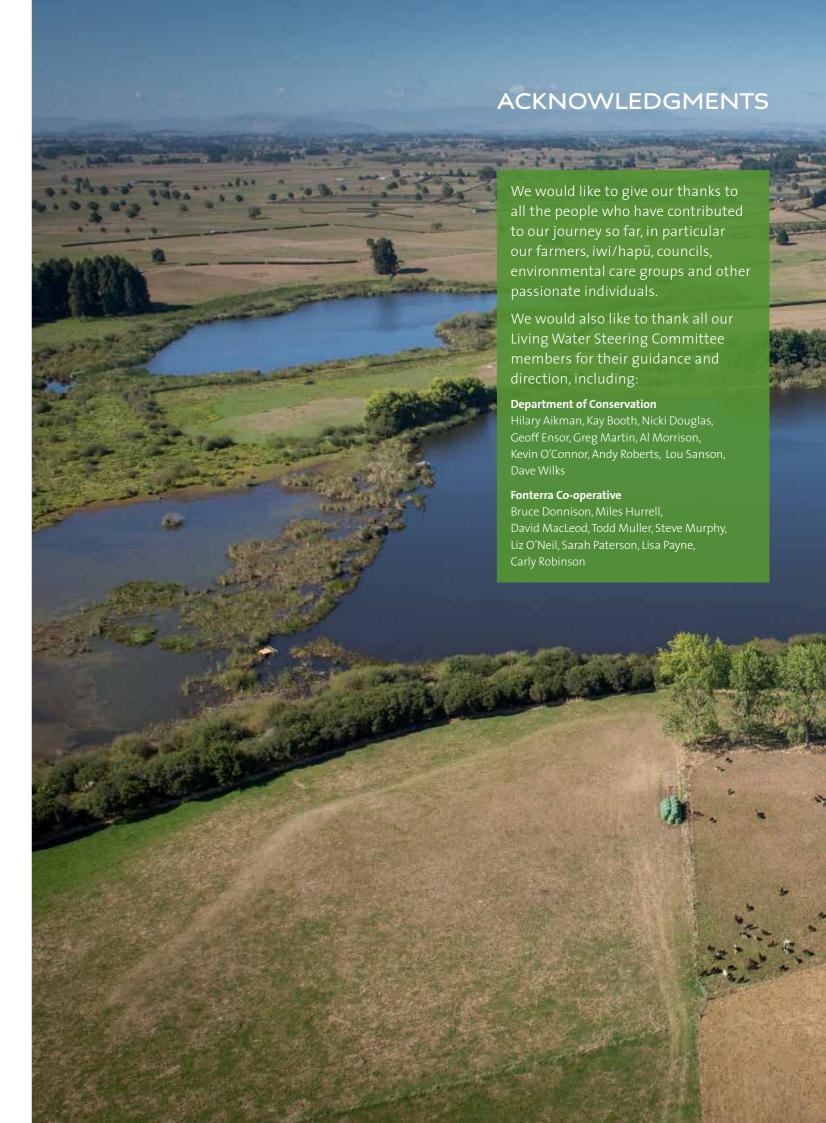


OUR PEOPLE

The Project Managers and Rangers from Fonterra and DOC driving the delivery of Living Water are:



For more information visit www.fonterralivingwater.com or contact livingwater@fonterra.com



Investment in Water'. This has now been simplified to

'Living Water'.







WORKING TOGETHER TO CARE FOR FIVE KEY CATCHMENTS

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www.fonterralivingwater.com

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