



Whakamana Te Waituna

Evaluation Report

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Disclaimer: This document has been prepared for the benefit of the Whakamana Te Waituna Trust, their partners and others in the Waituna catchment, as a resource to use in their future thinking about the catchment. The material contained within is provided solely for the purpose of being used within anyone's own participatory process. It should be subject to further consideration and refinement in accordance with their specific needs and circumstances. The individual perspectives we have presented may not always reflect the perspective of a partner organisation.

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EXECUTIVE SUMMARY

The Whakamana Te Waituna programme is an integrated initiative aimed at improving the health and sustainability of the Waituna catchment and its communities. It has developed a multifaceted approach that values collaboration, cultural aspirations, technical integration, community engagement, strategic land acquisition, and overall resilience in farming and catchment communities. The programme has been overseen by the Whakamana Te Waituna Trust, a co-chaired body with programme partners appointed and independent trustees.

The Whakamana Te Waituna programme, while ambitious and comprehensive, is not without its challenges. The initiative tackles complex issues spanning diverse socio-cultural, economic, and environmental aspects. To implement such integrated approaches, that also take the dynamic nature of catchments into account, requires strategic partnerships backed by substantial resources. Similarly, supporting Mana Whenua aspirations and fostering community engagement pose unique challenges. However, overcoming these hurdles and adapting to evolving circumstances is integral to the programme's mission of holistic catchment wellbeing.

INTRODUCTION & EVALUATION

Chapter 1 introduces the Whakamana Te Waituna programme and provides some of the background and context that guided its development. The original Theory of Change (TOC) and the underpinning assumptions that lie behind the programme application and development are set out. This chapter also outlines the evaluation approach used for the Whakamana Te Waituna programme. This is participatory, involving key partners and whānau in joint activities. It links back to the underlying TOC, formulated at the programme's inception. A performance story report approach is employed to explore the programme's impact, track achievements against expectations, and discuss insights gained over the programme's journey.

VISUALISING THE PROGRAMME

The programme's Theory of Change is essentially a guide illustrating the process and rationale behind a programme's expected impact, linking activities and outputs to desired outcomes. Chapters two and three provide framings that enabled the evaluation team to look across the individual workstreams and view the operation of the programme as a whole.

The different contributions made to the programme (inputs) as well as the range and reach of the activities and outputs delivered are illustrated in chapter two. Two different ways of looking at these elements are provided. The programme structure view shows activities associated with the Programme's governance, management and workstream delivery. The workstreams divided the work up based around key objectives, which is the most common way that activities are organised and viewed. The alternative engagement view shows how staff have engaged with various stakeholder groups across the diverse activities and workstreams. Looking at activities in this way helps shed light on the extent of collaboration and the distribution of responsibilities among the different participants.

As with most programmes aspiring to change the environment, the timeline for seeing desired state changes can be 15 –20 years or more away. Accordingly, chapter three outlines the changes the programme has contributed to so far. They are grouped into categories that represent the drivers and enablers of change within the wider human and ecological systems: organisational changes, relational changes, ecological changes, farmer and on-farm changes, iwi/rūnaka changes, capability changes (particularly social), contributions (in-kind), and scaling up and out. These changes represent intermediate outcomes, being crucial precursors and building blocks towards the achievement of long-term desired outcomes.

KEY FINDINGS

The challenges, insights and lessons offered in chapter four represent the results of a participatory and holistic evaluation of the programme, leveraging collective insights to assess its effectiveness and applicability to similar initiatives. These findings are designed to inform future endeavours where the aim is to work with others to bring about positive change, particularly in integrated catchment management.

While work has been organised into separate streams for practical programme management purposes, our evaluation approach has stitched these 'pieces' back together. The programme's key findings explore not only the direct outcomes and impacts of activities but acknowledge the range of the 'co-benefits' contributed.

Each key finding section also highlights the challenges, insights, and the evolution of programme practices and approaches.

The six key findings address the following topics:

1. Investing in partnerships: Whakamana Te Waituna emphasises the challenges and rewards inherent in sustaining partnerships. The programme underscores the necessity of a versatile team, equipped with diverse skills and ample capacity, as well as the importance of sufficient funding for leadership and project execution. Attention to staff welfare needs and fostering community unity are also important.

2. Contributing to mana whenua aspirations: The programme has contributed significantly to the Awarua Rūnaka achieving their aspirations for the Waituna catchment, which were woven through the shared programme. While whānau, agency and catchment community contexts (including capacity, attitudes, and values) all impacted on the programme delivery and outcomes, the development of a mahinga kai pā is providing multiple ways for the whānau to re-build connections to Waituna.

3. Integrated planning for integrated programmes: The programme highlights the importance of combining social and technical factors in both planning and implementation phases. Ensuring strong engagement (both 'internal' and external stakeholders) as well as the identification and review of intermediate steps towards longer term change is important. Developing a shared language and practices that cross different knowledge cultures and management systems is also necessary.

4. Community engagement : The programme underscores the complexity of community involvement and the need for diverse, layered strategies that are woven throughout projects and linked to outcomes, not outputs. It emphasises the necessity of initiating and supporting mutual dialogue and relationships to enable effective community engagement. It also calls for valuing community knowledge, cooperative behaviour, and conflict resolution through empathetic listening and respectful negotiation.

5. Right land in the right place: The programme underscores the importance of acquiring suitable land in the right locations to realise broader catchment visions. It illustrates how strategic land acquisition can support socio-cultural, economic, and environmental values, while also acknowledging the difficulties associated with identifying and securing appropriate land.

6. Contributing to farm and catchment resilience: It's important to recognise the contributions the programme has made to increased farming and catchment community resilience. This includes likely climate change impacts, land-use impact (and potential use change), collective mitigation, and growing expectations of international and local markets for 'ethical and sustainable products'. Community engagement, skills development, research and strategic planning also underpin building resilience.

PROGRESS SUMMARY & RECOMMENDATIONS

The final chapter provides an assessment of the programme's progress towards long-term outcomes from three perspectives. The first highlights four key intermediate outcomes that are being achieved through the programme. The second identifies the programme's contributions to the social, cultural, economic, and environmental well-being of the Waituna catchment and its communities. Lastly, a set of recommendations is provided.

The programme, with its aspirational vision, identified four progress markers. These are seen as journey stages, not rigid end goals. We've observed significant progress towards these outcomes. The WTW programme has delivered substantial value across social, economic, environmental, and cultural aspects. Through collective action, it has amplified resources and partner capabilities, achieving outcomes that surpass individual value through collaboration.

These reviews, together with the key findings (Chapter 4), provide valuable insights for similar initiatives, while also highlighting areas for a future phase of the WTW programme to refine. The recommendations suggest more focus is needed on the often overlooked and under-valued intermediate outcomes (or "supporting structures") required for progress towards more long-term environmental and social catchment goals. The following is a summary of the recommendations.

- **Strengthen inter-agency collaboration processes:** Review internal processes, address barriers, and improve communication among partners to enhance group decision-making and accountability.
- **Strengthen alignment with cultural aspirations:** Facilitate discussions between agencies and Mana Whenua to better support integrating cultural goals and aspirations into collective activities.
- **Enhance community engagement:** Develop integrated engagement strategies based on supporting the programme logic - clarifying what and who needs to change.
- **Maintain a land acquisition strategy:** Continue locating, acquiring (funding), and managing lands that support a whole-of- catchment management strategy.
- **Diversify capability and capacity:** Build staff in both technical and socio-cultural aspects of water management, focusing on environmental and social capabilities and capacities.
- **More emphasis on evaluation and adaptive management:** Important progress indicators (intermediate outcomes) should be embedded in monitoring and evaluation systems and wider management and decision-making.

2013

Lagoon technical guidelines released

Understanding the science of the lagoon system to inform and identify further work needed to reverse the decline in health

2015

Determining community values for the Waituna catchment and lagoon

Community workshops developed a vision and basket of values for use in describing the Waituna Catchment and Lagoon

2017

Short-term opening consent (to 2022) granted

Conditions included higher summer lagoon levels and spring-only openings to lessen ecological impact (of drainage) - a first step towards management regime change

Extent of nutrient deduction & Lagoon management changes quantified

The research made it possible to identify the extent of land buffering required and therefore develop a project budget

Joint work programme & funding proposals finalised

The research made it possible to identify the extent of land buffering required and therefore develop a project budget

2018

Co-governed collaboration structure formalised as Whakamana Te Waituna Trust

'Legalised' the collaboration structure and power sharing (beyond any one partner)

Funding confirmed by partners & MFE

Partners and central government 'matched funding' enable the joint programme to proceed, particularly

Land buffer purchase process begins

This marks the start of the biggest investment in one of the programme's main strategies. It also marked the beginning of restrictions on community communications to keep land purchases confidential until completed, but impacted community perceptions of transparency and trust of the new Trust



2020

Stage 1 of Land Buffer purchases completed

Land use change underway and locked in through covenanting

Contaminant Intervention (reduction) Report completed

Critical to directing significant investment in catchment scale

Land returned to Rūnaka ownership

(Te Wai Parera Trust) for Mahinga Kai Pā development. Access to land was a critical 'unlock' and pathway for mana whenua aspirations

Pikiraurohi, Te Pā Mahika Kai officially opened on Waitangi Day

A celebration for Ngāi Tahu whānui and a welcome of the wider community and whenua

Executive Director appointed

Provided new impetus to project reporting, Whakamana Te Waituna partner confidence and strategic risk management

Trial of peak run-off control structures underway

Localised testing of contaminant reduction tools (cost & effectiveness) important for farmer decision-making (up-take)

Ponds created on the Pā for taonga species habitat and water 'polishing'

Restoring whānau access to mahinga kai

Governance review completed

Provided insights and ways to improve the way the partners worked together to deliver the joint work programme

DOC & Awarua Rūnaka applied for a resource consent to manage the Lagoon opening

Changing the lagoon management regime (to include ecological and cultural health) was one of the two critical science-backed pathway identified to restore lagoon health (alongside nutrient management)

New constructed wetland development breaks ground

The wetland project seeks to address nutrient management (the other critical pathway identified for lagoon health) at a catchment-scale, expected to increase the pace of change possible beyond a solely 'farm by farm' approach



2021



2022

2023



1. INTRODUCTION

1.1 EVALUATION AIMS

The Whakamana Te Waituna (WTW) Trust was set up in February 2018 to coordinate activities of the partners involved in working to enhance the mana of the Waituna Lagoon and Catchment. The WTW programme was established to address the pressures on, and ensure the long-term resilience of, the Waituna community, catchment and lagoon.

The purpose of this evaluation is to assess how Whakamana Te Waituna is delivering on desired outcomes and demonstrating effectiveness in relation to its theory of change.

The evaluation approach aims to:

- Contribute to the ongoing monitoring and reporting of Whakamana Te Waituna activities as part of transparent and sound management.
- Establish a credible case for the programme's contribution, while providing a common language for discussing different activity streams and focusing on results.
- Support the programme and its partners as they look to encourage, guide and catalyse future activities that support a thriving community and resilient environment.

With these outcomes in mind the evaluation design aims to be participatory and learning-based. The primary users for the review are the programme staff and partner agencies. The findings, conclusions, and recommendations can be of use in refining future work by the WTW Trust and drawing lessons to inform future work by the partners. Lessons from the review may inform other catchment projects.

The main goal of this report's development was to serve as a resource for those planning initiatives in the catchment. People deeply engaged in long-term programmes often focus mostly on what still needs to be done (which can be disheartening), without acknowledging what progress and achievements have already been made. We've also observed that people can become so focused on their particular workstream or interests that they require assistance connecting their actions to the larger context, including related workstreams.

It is acknowledged that the methodology used for this evaluation, which involved the cooperation and active participation of Trustees and programme staff, has already supported some useful reflective exercises. Following the report's framework, other participants can similarly evaluate their programme experience over time, considering how their accomplishments compare to their initial expectations. This will aid future planning for ongoing work in the catchment.

Report Structure

This first chapter outlines the evaluation's framework and introduces the Waituna catchment context, the WTW programme, and its Theory of Change (TOC), which forms the basis for the remainder of the report.

Chapter 2 delves into the inputs of the programme: the partners, knowledge, and resources. It outlines workstream activities and the outputs produced, and, together with a milestone timeline, provides a snapshot of the programme's collaborations over the past five plus years.

In Chapter 3, the focus moves from activities and outputs to the actual difference the programme has made. This analysis is conducted across categories instead of workstreams, as some outcome areas can be linked to different workstreams. Detail is provided on intermediate outcomes, changes in practices, and the impacts across diverse clusters such as organisations, farmers, community groups, and schools.

Chapter 4 presents the key findings and co-benefits derived from the programme. It tackles the challenges, insights, and lessons learned from operating within the Waituna context and considers the applicability of these lessons to future catchment management efforts.

The final chapter, chapter 5 provides a broader evaluation of the programme's impact by determining how much progress has been made towards identified long-term outcomes. This assessment looks at the contribution of intermediate outcomes, the potential unintended impacts, and the effectiveness of the programme's strategies.

A concluding assessment based on the four wellbeings (social, cultural, economic and environmental) is also provided along with recommendations for future work.

Three sidebar stories are interspersed throughout this report to offer a more focused perspective on various facets of the programme. The report concludes with two annexes: the first delineates how the programme team initially defined success, and the second provides details on the key information sources that underpinned this evaluation.

1.2 PROGRAMME CONTEXT

The Waituna Lagoon, a 3,500-hectare natural coastal lagoon in Te Waipounamu (South Island), rests within a 20,000-hectare catchment, encompassing significant wetlands.

Historically enriched by diverse ecological habitats, it provided a significant source of sustenance for Ngāi Tahu whānui, who have deep-rooted connections with this place.

The transition of the region over the past century, driven primarily by economic activities such as dairy and beef farming, has created a prosperous community but this has come at an environmental and cultural cost.

The establishment of this area as a Ramsar Wetland of International Importance (1976) and a scientific reserve (1983) underlined its ecological value. Its cultural significance to the local Ngāi Tahu people is acknowledged under the Ngāi Tahu claims Settlement Act 1998. It remains one of the best examples of a natural coastal lagoon in the country. However, sediment accumulation, nutrient inflows, and drainage management practices threaten its sustainability.

A report on Southland's Freshwater Environment, combined with monitoring data from Environment Southland (ES) and the Department of Conservation (DOC), warned in February 2011 that the lagoon was in danger of becoming algae dominated. In response to the emergency, remedial measures, scientific investigations, and communication channels were set up. While the risk of 'flipping' remains, the focus is on long-term efforts to improve the health and well-being of the Lagoon and its catchment. Scientists' contributions to understanding these problems have guided potential solutions.

A recent socio-economic assessment notes that the region's restructuring has paralleled national rural trends, with the conversion of farms to dairying over the past 25 years leading to population growth and community diversity. It acknowledges that a reversal of this shift could negatively affect employment, particularly if dairy farming activities decrease.

Multiple agencies, including the Department of Conservation, Environment Southland, Southland District Council, Te Rūnanga o Ngāi Tahu and Te Rūnanga o Awarua, have statutory roles in the care and management of Waituna Lagoon and its catchment. In 2013 they formally came together as the Waituna Partners Group, with the aim of working alongside the community and other stakeholders for the long-term benefit of Waituna Lagoon, its catchment, and the community.

Taylor, C.N., McClintock, W., and Mackay, M. (2015). Social assessment of the Waituna Catchment, Southland – anticipating the impacts of nutrient limits for farming systems. A report for DairyNZ. Taylor Baines and Associates.

1.3 DEVELOPING THE PROGRAMME

In 2017 the Waituna Partners Group was successful in gaining funding from the Government's Freshwater Improvement Fund to further the work already underway in the Waituna catchment. The Partners (Environment Southland, Department of Conservation, Southland District Council, Te Rūnanga o Awarua and Te Rūnanga o Ngāi Tahu) had been working together in this special catchment since 2013.

In conjunction with Living Water (the 2013-23 partnership between the Department of Conservation and Fonterra), the Partners agreed to contribute significantly in terms of cash and in-kind support to a joint work programme. The resulting Whakamana Te Waituna (WTW) programme was established to address the pressures on, and ensure the long-term resilience of, the Waituna community, catchment, and lagoon.

The Whakamana Te Waituna Trust was set up in February 2018 to coordinate activities of the partners involved in working through the programme to enhance the mana of the Waituna Lagoon and Catchment. The partners, along with the Ministry for the Environment (Freshwater Improvement Fund), committed \$13.4 million in direct funding over five years.

The Whakamana Te Waituna programme was developed around a partnership approach to the application of Integrated Catchment Management to freshwater challenges.

Specifically, this programme aimed to:

- Ensure the long-term hydrological regime of the lagoon protects the values of the lagoon and provides certainty for adjoining landowners.
- Reduce the sources and pathways of contaminants entering the lagoon and its tributaries.
- Support Te Rūnanga o Awarua's aspirations to access mahinga kai, reconnect their people to place and being able to exercise their rangatiratanga and kaitiaki responsibilities.
- Maximise co-benefits (to the wider catchment communities) by demonstrating pathways for:
 - growing the use of mātauranga Māori in freshwater management,
 - scaling-up prior 'proof or concept' trials of technologies and design principles for alternative drainage management (on- and off-farm), and interventions to lower impacts of current farm system practices, and
 - operating a well-structured, multi-disciplinary partnership and community engagement to achieve freshwater management outcomes.

1.4 EVALUATION APPROACH

The design and implementation of the evaluation process is based on a model of participation. This is supported by approaches that involve rūnaka and other key partner representatives in all appropriate activities. The Performance Story Report (PSR) design is based around methods that lend themselves to joint evaluation activities and is underpinned by programme logic and its underlying theories of change.

The PSR approach promotes an inclusive approach to gathering the report information. It emphasises the involvement of the key people involved through various learning and reflection opportunities during the entire process. By actively participating in the exploration and analysis, those involved are more likely to develop a sense of ownership and enhance the likelihood of implementing the findings.

An Evaluation Team made up of WTW staff members and external consultants was formed to guide the evaluation process, and act as champions within their respective organisations, learning from the evaluation process itself (review and reflection) and applying and disseminating the programme's insights.

A credible PSR emphasises intended goals, measures achievements relative to expectations, and distils lessons learned. It addresses the essential question of impact. The process of crafting a PSR involves clarifying the Theory of Change and accompanying programme logic. It also involves developing inquiry-guiding questions and drawing conclusions in collaboration with key role players (see Appendix II - for indication of information sources and interviews, workshops, etc.).

PSRs provide a clear, evidence-based narrative that effectively illustrates a programme's contribution to its intended outcomes. This method, introduced by John Mayne in 2004, encapsulates the programme's context, goals, and results achieved, balancing in-depth information with brevity for easy comprehension. It thus creates a shared language for discussing various aspects of the programme. This helps teams focus on results, and promotes a common language for staff, partners, and other stakeholders to discuss aspects of the programme.

PSRs are beneficial because they provide a deep, yet concise understanding of a programme. Despite potential bias criticism, the PSR methodology balances reporting strengths and weaknesses. They offer credible narratives and promote common ground for discussing diverse programme areas. PSRs are selectively crafted to spotlight significant outcomes and should complement, not supplant, other reporting processes.

1.5 THEORY OF CHANGE

A Theory of Change (TOC) provides the foundational roadmap that outlines the desired outcomes, the steps to achieve those outcomes, and the causal linkages between steps and outcomes. This helps provide a shared understanding of what the programme is intended to accomplish, creating a basis for coordination and evaluation. In delineating this framework, critical elements such as the programme's background and context, a detailed depiction of the TOC, and underlying assumptions are included.

At the beginning of the programme (2018) a number of wider programme level foci were co-developed by a project team and WTW staff. These key areas represented a collective future view of a successful project, highlighting the different activities and outcome areas that the project was expected to contribute to. These areas were:

- Leadership and co-ordination
- Iwi/Rūnanga development (programme contribution to)
- Awareness and engagement
- Contaminant reduction
- Biodiversity and pest management
- Lagoon health and hydrology
- Resilient rural community
- Recreation and Tourism³

It was recognised that these are all important outcomes, and that there is a strong degree of interlinkages between them. What partner representatives envisioned a successful WTW programme would contribute to in each outcome area (back in 2018) is summarised in Appendix 1.

It was acknowledged that many of these outcomes were long-term and would not be fully realised within the life of the 6-year programme, but that the programme would contribute to short- and medium outcomes that were necessary precursors to these.

It was also recognised that different partners and wider stakeholders would place more importance on some key outcomes than others depending on their priorities. This is indicated in the simplified programme theory of change.

³This Outcome Area was "de-prioritised" in this first phase of the programme due to the workload associated with other outcome areas and is therefore not a focus in this current evaluation.

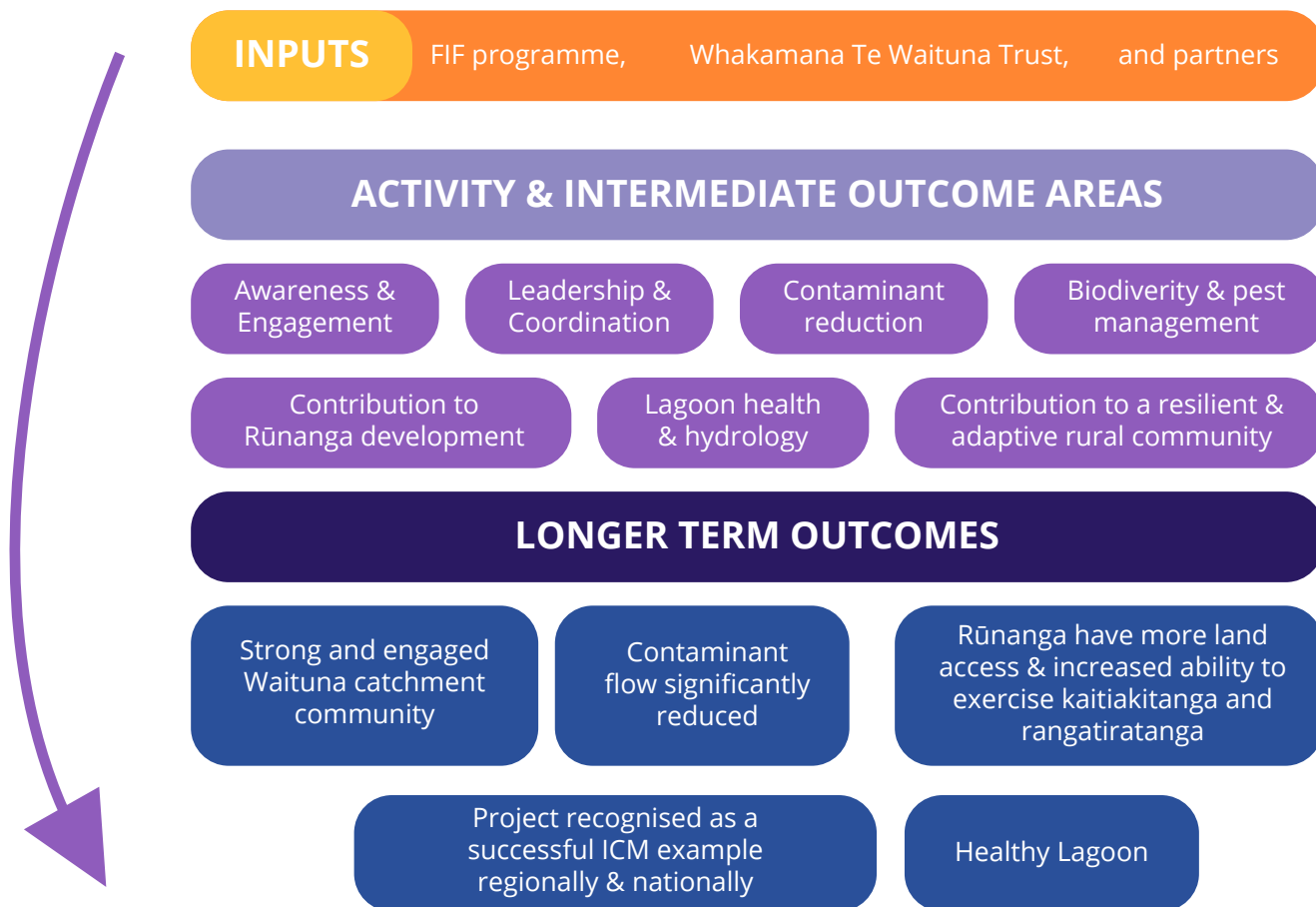


Figure 1: Simplified logic model for the Whakamana Te Waituna programme (Adapted from Whakamana Te Waituna: 2019 Monitoring & Evaluation Programme & Action Plan report)

Underpinning Assumptions

Assumptions are important in a Theory of Change. Setting out an understanding of what is believed will make a programme work (clarifying its underlying assumptions), is crucial. Doing so helps programme staff and other stakeholders in the catchment to make clear plans and check whether the programme is doing what they hoped it would do.

The overall theory of change for the Whakamana Te Waituna programme is based on the understanding that the Waituna Lagoon is in a highly disturbed ecological state. It recognises that this will require some coordinated and collective change from the wider catchment community to help safeguard and manage this. As such, the catchment and lagoon require ongoing active management to improve their ecological condition. This is to reduce the risk of the lagoon changing from having clear water and an aquatic environment dominated by aquatic macrophyte plants such as rupia, to one which has turbid and murky water dominated by algal slime and other suspended phytoplankton.

Achieving and sustaining the Lagoon in a moderately disturbed state will require a number of environmental management changes. Reducing the input of the principal contaminants (N, P, sediment and E. coli) to the lagoon will require changes in land-use, land-use intensity and how land and waterways (including land drainage systems) are managed throughout the Waituna Lagoon catchment. Changes in when and how often the lagoon is opened to the sea will need to be considered, driven by ecological priorities rather than a focus on land drainage.

Keeping a focus on the long term “numbers” (eg. amount of sediment reduction needed) is important to assure programme success. However, we also need to recognise that these may change as the environment and social/political contexts continue to change.

The key assumptions underpinning this theory of change include:

- Change will be required from all parties. An early change is the development of a linked partnership approach across agencies.
- The changes in land-use and land-use intensity will be feasible and acceptable to the local community and other stakeholders.
- The measures taken to reduce the input of contaminants will be effective and will result in the desired reductions.
- The changes will result in the stabilisation of the Lagoon in a moderately disturbed ecological state, which will in turn prevent a regime shift to a eutrophic state.
- The programme’s activities will contribute to short and medium-term outcomes that are necessary precursors to the longer-term outcomes envisioned.

The Theory of Change for the Whakamana Te Waituna programme depends on the collective effort of all catchment stakeholders to mitigate contaminant input to the lagoon. Whakamana Te Waituna is one contributor to that aim. The programme recognised several steps to success along the way, and these are set out in the table in Appendix 1 as they relate to different workstreams. These outcomes were developed by those involved in the development of the FIF proposal reflecting on how success might be manifested over the next ten years or so. Each grouping comprises a mixture of short-, medium- and long-term outcomes. By learning the best way to take these steps together, the wider catchment community can stop the degradation of the Waituna Lagoon and stabilise its ecosystem.



The largest mahinga kai pā pond, eastern side looking across Waituna Lagoon towards Bluff



2. INPUTS, ACTIVITIES & OUTPUTS

In 2018 the Whakamana Te Waituna (WTW) programme developed a logic model sketch that identified activities and outputs it expected to deliver and produce through the partnership's workstreams, that would contribute to the achievement of the long-term outcomes. As a partnership programme, developing the collaborative structures (or scaffold) for the programme, bringing the partner organisations together, and working with the local communities has been complex and challenging work.

This chapter recognises the different contributions made to the programme (inputs) as well as the range and reach of the activities and outputs delivered.

2.1 INPUTS

Progressing Whakamana Te Waituna's holistic restoration vision has called upon a broad array of knowledge, skills, time, resources and funding. These contributions have come from a range of sources in many different ways.

Knowledge & Capability

The WTW programme has benefited from the knowledge, experience and skills of many people from within the catchment community as well as beyond. These contributions are not always visible or fully recognised in planning or reporting processes and are difficult to quantify.

These contributions have come from a range of different organisations, including:

- Partner organisation staff and Trustees
- Rūnaka whānau
- Volunteers and recreational organisations
- Farmers, land managers
- Training and educational institutions
- Researchers, consultants, contractors

In-kind Support

Along with knowledge and capability, in-kind support is another non-monetised contribution that is often under-recognised but makes a significant difference to achieving outcomes.

This included the likes of volunteer time, (organisation staff and/or time, alignment of other services, the provision of resources, the use of equipment and facilities. Contributors include the Whakamana Te Waituna partners, Rūnaka whānau, farming communities, researchers and contractors, industry, and recreational stakeholders.

Direct Funding

The significant FIF funding for the project was made possible due to the scale of the direct funding from the WTW programme partners. Much of this funding was available for land purchase to support programme outcomes.

- WTW partners have contributed \$7.348 million over the 6 years of the programme (2018 - 2023)
- MFE's Freshwater Improvement Fund provided \$6.025 million (2018 - 2023)



Whakamana Te Waituna Trustees in front of the whareniui, Tahu Pōtiki, at Te Rau Aroha Marae.

2.2 ACTIVITIES & OUTPUTS

The programme's activities and outputs are summarised in this chapter in two different ways. Firstly, by the programme's structure, and then by who was engaged/involved in different programme activities.

The programme structure view shows activities associated with the programme's governance, management and workstream delivery. The workstreams divided the work up based around key objectives, the most common way that activities are organised and viewed.

The alternative engagement view shows the range of activities each partner/ contributor/ stakeholder was involved in. This view can help remind us that all 'environmental' work involves people, organisations and 'stakeholders', each with different cultures, perspectives, and agenda.

Governance, Management, and Workstream Delivery

Governance

The Whakamana Te Waituna Trust was made up of representatives of all the funding partners, except for MFE, and co-chaired by respective appointees from Environment Southland and Awarua Rūnaka. While the Deed of Funding was signed solely by ES with MFE, the WTW Trust had overall responsibility for the Programme, with the co-chairs leading regular bi-monthly WTW Trust meetings. The Trust also provided direction through strategy days, commissioning a governance review and training, and other workshop sessions.

Management

The programme structure started out with a Joint Officials Group (JOG) supporting the Trust and overseeing operational delivery with support from a Programme Manager and Project Coordinators. This structure was later replaced (following a governance review in 2020) by a Project Management Office (PMO) made up of an Executive Director and a dedicated Project Coordinator. A Project Steering Group (4 members), who replaced the JOG, was also established to provide advice and support to the Executive Director on behalf of the partner organisations. The PMO and PSG met fortnightly, ensuring tactical oversight and prompt action on emerging issues. Similarly, the Waituna Team meetings of workstream leaders, PSG representatives, and the PMO held monthly sessions, fostering cross-functional collaboration and decision-making. The PMO oversaw project financial management, with funding administration provided by Environment Southland.

Delivery workstreams

The Whakamana Te Waituna programme utilises six strategic workstreams to form an integrative approach to restoring the Waituna catchment and lagoon. Each workstream has been led by a staff member from one of the partner agencies who is responsible for driving that workstream's detailed planning and project delivery, including procurement, contract and budget management, relationship management and reporting. Informally, workstream leads also contributed to other workstreams' planning and delivery (when and as they could), as most activities and projects contribute to multiple outcomes.

Governance / Project Management Office (Leadership and Coordination) is the project's management hub, supporting the Trust business processes, facilitating resource allocation, supporting the collaboration structures and relationships, monitoring and evaluation, and reporting. Key outputs include Trust meeting papers and records, progress reports, stakeholder meetings, strategic planning documents and financial planning.

Kaitiakitanga (Iwi/Rūnanga Development) focuses on development of the Mahinga Kai Pā, particularly as a way of restoring taonga species and reconnecting whānau to the place and traditional practices. This focus also links directly to the contaminant reduction and biodiversity and pest management workstreams. Work undertaken (outputs) includes staged land retirement (from farming), pond and habitat development for taonga species and water quality improvements, hosting cultural activities and educational programmes.

Community Engagement (Awareness and Engagement) aims to foster the catchment communities' awareness and understanding of the programme's activities and progress, through the likes of the Trust's website, social media posts, community events, and contributing articles to community newsletters (eg. Gorge Road). Community engagement undertaken through other workstreams is also supported.

Contaminant Intervention (Reduction) promotes sustainable land management practices on private and public land. This includes farm planning advice and on-farm trials of tools and technology to reduce sediment and nutrient flows from farmland (eg. promoting the uptake of good farming practices, sediment traps, farm scale wetlands, riparian planting, nitrate and phosphorus filters, and fine particle fertiliser application trials). Another significant focus is trialling the re/establishment of wetlands, including at a scale that can help multiple farms (i.e. a catchment-scale approach) reduce contaminants flowing into the lagoon.

Biodiversity and Pest Management is focused particularly on work in the lower Waituna Creek, including installation of instream structures to provide habitat for native (taonga) species, trialing a 2-stage channel to reduce sediment and nutrient flows, and significant riparian planting. Work also includes supporting on-farm biodiversity protection through fencing sites and supporting mahinga kai species protection on the Mahinga Kai Pā.

Hydrological Regime (Lagoon Health and Hydrology) involves activities towards stabilising the lagoon's ecological state through land purchases and changes to the lagoon management regime (consent).



The Mahinga Kai Pā includes the creation of habitat for mahinga kai (taonga) species for eventual harvesting. Land-use change (retirement from intensive farming) is also underway on the Pā, with further changes planned over time.

2.3 ACTIVITIES & OUTPUTS - BY THE NUMBERS

Many indicators help assess success across multiple workstreams. These metrics are particularly useful for acknowledging progress in achieving contracted outputs (goods and services delivered by the programme).

268 Number of community people involved in meetings, hui, workshops & other events	115 Trust partnership governance & management meetings	60+ People from partner organisations who have been involved in the programme to date	\$13.4m Direct funding from partners & external sources over 6 years
\$9.5m Invested in land purchases	584 Hectares of land (buffer) purchased	403 Hectares for mahinga kai pā	17.5 Hectares of ponds and habitat created for mahinga kai species
3ha Area of (constructed) wetland underway to support a catchment-scale wetland programme to improve water quality	48/61 Farm plans developed with farm managers/landowners	95% Dairy farms in the catchment with farm environment plans in place	4 On-farm peak run-off control structures trialled (check dams and wooden weirs)
2 Nitrogen & Phosphorus filter trials in tile drain areas	6.9ha of native bush on farms protected with fencing (subsidised) to exclude stock	16,895 Plants planted on farm riparian areas	16,750 Plants planted along lower Waituna Creek

2.4 PARTICIPANTS & PARTNERS

The following section explores the collaborative aspect of the Whakamana Te Waituna programme, exploring how staff have engaged with partners and various stakeholder groups across the diverse activities and workstreams.

Looking at activities in this way helps shed light on the extent of collaboration and the distribution of responsibilities among the different participants.

Farmers (and/or on-farm)

Farmers are vital to progressing the WTW vision and projects. They have been involved in a range of different ways, both on and off-farm. They've been part of significant on-farm riparian plantings with 16,895 plants added and have fenced off areas of native bush on their farms.

Forty-eight farms have also worked with the team to develop farm plans, updating and expanding farm information and management actions to improve water quality and protect biodiversity, covering 95% of dairy farms in the catchment.

Farmers also worked with staff to trial sediment and nutrient reduction devices on farms, aligning with the programme's objective to reduce contaminant losses into the catchment and lagoon.

Farmers were a critical part of the acquisition of 584 hectares of land for lagoon buffering and engaged in discussions about contaminant loss reduction and lagoon management.

Overall, the programme has provided support to farmers through planning and advisory services, grants and subsidies for planting and fencing, installation of sediment reduction devices on-farm, and for some, the option to divest themselves of land likely to be impacted by lagoon level changes.



On farm riparian planting in the catchment

Mana whenua: Awarua Rūnanga & Te Rūnanga o Ngāi Tahu (TRONT)

Awarua Rūnaka and Te Rūnanga o Ngāi Tahu (TRONT) have been an integral part of the Whakamana Te Waituna Programme, contributing to both strategic direction and operational elements.

At a governance level, Awarua Rūnanga representatives co-chair the Trust as well as providing a second Trustee, while TRONT participates actively in the Project Steering Group, and leads the kaitiakitanga workstream, while also contributing to all other workstreams. They were part of the land acquisition processes for lagoon buffering and the development of a new lagoon management regime, balancing the needs of farming, ecological health, and cultural values. With the Department of Conservation (DOC), they are seeking to hold the Lagoon's opening consent.

The Whakamana Te Waituna Trust established Te Wai Parera Trust (TWP) to manage land purchased as part of the project. Control of TWP was vested with Rūnaka in 2021 enabling the development of a Mahinga Kai Pā. Efforts are currently underway to transform the Pā infrastructure into a central hub for communal activities and initiatives aimed at reconnecting younger generations to the area. The TWP Trust has already hosted an array of community sectors and groups at the site, including duck shooters, conference attendees, Councillors and staff members, Crown Research Institutes and the Southland Institute of Technology.

Other work associated with the development of the Pā includes the installation of "exemplar ponds" to improve water quality and provide habitat for mahinga kai (taonga) species for eventual harvesting. Land-use change (retirement from intensive farming) is also underway on the Pā, with further changes planned over time.

Councils: Environment Southland (ES) & Southland District Council (SDC)

Both Councils have been consistently engaged in all levels of the Programme's governance and management. The Chair of Environment Southland (ES) co-chairs the Whakamana Te Waituna Trust with one of the Awarua Rūnaka appointed Trustees, and ES staff and councillors (in an appointed Trustee capacity) participated in negotiations to purchase catchment farmland for lagoon buffering.

ES led the community engagement workstream, hosted financial systems management, provided legal advice, and maintained the Whakamana Te Waituna website to promote transparency. ES staff advised landowners on nutrient and sediment reduction plans, enhancing contaminant reduction on farms. ES worked with the Waituna Catchment Liaison Committee, DOC and Awarua Rūnaka to progress a new lagoon opening consent.

Southland District Council (SDC) Trustees, while serving on the Trust's Board, have actively contributed to restoration planning for Waituna Creek and community development initiatives. SDC manages access to the lagoon via its roading network. This includes an upgrade of the only access bridge to accommodate increased water levels due to climate change and the rise in the lagoon level to support its ecology.

Department of Conservation (DOC) & the Living Water partnership

The Department of Conservation (DOC) has been a partner in the Whakamana Te Waituna programme, both as a central government agency in its own right, and as part of its "Living Water" partnership with Fonterra. It also provides an 'advisory' Trustee. DOC has provided guidance and leadership, particularly within the biodiversity and pest management workstream. They have also contributed to other workstreams (such as contaminant reduction and lagoon hydrology). Their leadership was critical to facilitating and implementing strategies to enhance biodiversity within the Waituna catchment.

DOC has had a significant role in the management of lower Waituna Creek, leading the development of a two-stage channel for the Creek. This project aims to improve the Creek's natural functionality and provide better habitats for native species. In-stream habitat trials conducted by DOC have helped inform and understand how to enhance aquatic environments.

The "Living Water" partnership supported the creation of evidence-based decision-making tools. This included an extensive review of the existing science in the catchment by consultants such as Aqualinc, Boffa Miskell, GHD, and The Agribusiness Group. Aqualinc was subsequently engaged to formulate strategies for a significant nutrient reduction in the lagoon.

Fonterra & the Living Water partnership

Fonterra, a major dairy industry company and partner in the Whakamana Te Waituna programme, has contributed across the governance, management, and delivery of the Programme, including through their "Living Water" partnership with DOC.

Their leadership of the Contaminant Intervention workstream involved commissioning investigations and trials of various sediment and nutrient reduction techniques, such as fine particle fertiliser application, sediment traps and biofilters. Through their Sustainable Dairy Advisor service, they have led the implementation of Farm Environment Plans in the catchment, combined with the promotion and uptake of good farming practices.

Fonterra has led work with Aqualinc and Tonkin and Taylor to develop a contaminant reduction strategy for the catchment, which includes the construction of catchment scale wetlands, land retirement and on-farm interventions. More recent work has centred around the securing of land for a trial constructed wetland and obtaining resource consent for the work.

Fonterra increased their staff capacity (Sustainable Dairying Advisors) to assist their Co-op farmers in formulating and implementing Farm Environment Plans (FEPs). As a result of this initiative, all Fonterra dairy farms in the catchment now have tailored FEPs in place.

Schools, community & environmental groups

Schools, community groups, and environmental organisations have played an active role in the Whakamana Te Waituna project. Their involvement ranged from educational activities to on-the-ground restoration work.

Local schools participated in educational field trips to the Mahinga Kai Pā and planting days. In the broader community, the editors of the Gorge Road Newsletter were keen to share news of Whakamana Te Waituna's progress. Recreational users of the Waituna Lagoon and catchment have also been involved - conversations with duck shooters about continued access to land now part of the Mahinga Kai Pā, and with Fish & Game Southland around pond development on the Pā.

Community planting days, orchestrated in conjunction with various environmental groups, have played a useful role in improving the riparian areas as well as building relationships.

Researchers, consultants, and other intermediaries

Planning and implementing the significant catchment-scale change needed was always going to be complex and costly. The programme worked with a range of agency staff, researchers, consultants and knowledge to design, cost, implement, monitor, review and evaluate this comprehensive initiative, building on past years of research and knowledge.

Contracted work has contributed to a better understanding of the hydrology of the lagoon and its impacts, including work with NIWA and Otago University. Land & Water Science, Tonkin & Taylor and Aqualinc have undertaken investigations to provide better understanding of the catchment's contaminant pathways and effective intervention options. Gail Tipa & Associates supported mahinga kai planning, while Fish & Game Southland and Te Tapu o Tane contributed to delivery. Habitat restoration work has included the likes of Cawthron Institute, NIWA, MWH, The Plant Store and Te Tapu o Tane. Programme planning, monitoring, evaluation, and management work has included Aqualinc, Will Allen & Associates, VM Works and Natural Decisions NZ.



Early plantings along Waituna Creek after the re-shaping of the banks.



An on-farm Nitrogen Filter



The Trust members visiting Waituna Creek



Waituna Creek is a story about people

Waituna Creek, the primary tributary of Waituna Lagoon, is vital to the lagoon's health. However, farming-related activities have led to its ecological degradation. To address this, stakeholders, including government agencies, local authorities, mana whenua, community members, industry organisations, businesses, and research agencies, have looked at how to work collectively and dedicated resources towards the restoration of the lagoon and its catchment. It's a microcosm of issues facing waterways across the country.

From 2014 to 2023, interventions were carried out in the creek's lower reaches to enhance stream health, decrease sediment loads to the lagoon, and improve aquatic biodiversity habitats. These interventions were complemented by communication and engagement activities to foster dialogue and promote a partnership approach.

A riparian buffer now separates the creek from the neighbouring farmland, excluding livestock and facilitating riparian planting and native habitat restoration. The well-vegetated benches provide erosion protection and promote bankside deposition, reducing sediment transport to the lagoon.

Living Water installed log vanes and manuka bundles to enhance fish habitat. Fish population monitoring data suggest that these restoration efforts have improved the instream habitat for fish, with a significant increase in diversity and biomass.

While these are all environmental outcomes, equally they can be seen to be all about people and changing practices.

This work has fostered relationships among various stakeholders in Waituna. Trust and respect have been cultivated among partners, and coordination and collaboration have improved. Partners are sharing information more broadly within their organisations, and farm environment plans have been positively received by the agricultural community.

[Source: Lower Waituna Creek Report (2023)]

Photo: The national Living Water team visiting the Waituna Creek two-stage channel

3. OUTCOMES - What difference this work has made

This chapter outlines the changes the Whakamana Te Waituna programme has contributed to so far. They are grouped into categories that represent the drivers and enablers of change within the wider human and ecological systems - organisational changes, relational changes, ecological changes, farmer and on-farm changes, iwi/rūnaka changes, capability changes (particularly social), contributions (in-kind), and scaling up and out.

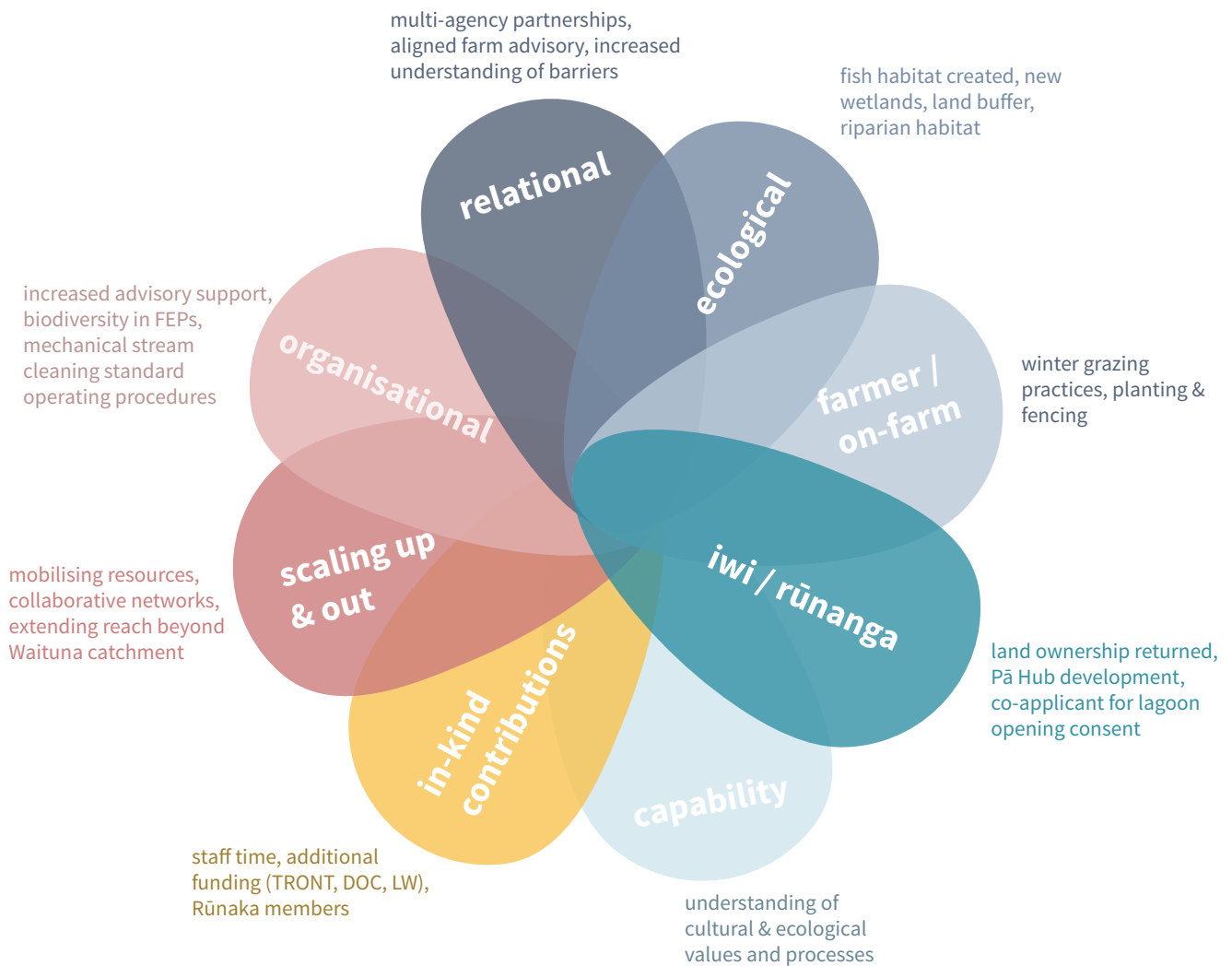


Figure 3: Outcomes Examples

As with most programmes aspiring to change the environment, the timeline for seeing desired state changes can be 15 - 20 years away, beyond most projects' funded horizons. In 2018, as part of a logic model sketch, the programme identified intermediate outcomes, or changes that would be seen in the short- to medium-term that were building towards the long-term outcomes.

From a systems perspective, the WTW programme can be seen fundamentally as a social collaboration, geared to also engendered substantial longer-term ecological transformations within the catchment. These intermediate outcomes provide crucial precursors and building blocks towards the achievement of long-term desired outcomes.



Manuka, along with other native plants, thrive around Waituna Lagoon, helping restore the area's natural habitats

3.1 RELATIONAL OUTCOMES

The programme's efforts have not only fostered new dialogues, partnerships, and collaborations, but have also shifted the relational dynamics and diversity of actors with interests in the catchment towards a common vision. This means both an appreciation of shared values, and a better understanding of individual values. Through this collaborative approach, the programme is also helping facilitate an environment more conducive to the cross-pollination of ideas, shared learning, and collective decision-making.

However, the programme, like others of its scale, has faced numerous relational challenges within the broader catchment. In this case there were some issues that created tensions from the start, particularly the land purchases and later, the lagoon consent.

Challenges like these are an integral part of community-focused catchment initiatives. Recognising this, both the programme staff, partners and the catchment community are working to resolve many of these issues. In the future, agencies, Mana whenua and communities must be ready for difficult dialogues, including handling disruptive and disrespectful behaviours.

Programme partners themselves (Trustees, dedicated staff, wider agencies staff and whānau), are engaging in new and different ways towards shared aspirations. This has led to enhanced coordination and alignment between partners, and a deeper understanding of the institutional barriers to change has emerged, setting a foundation for a more proactive approach to addressing these challenges.

These relational changes encompass the emergence of new forms of dialogue. A workshop series was organized to plan and advance biodiversity-focused efforts in the lower Waituna Creek, which successfully brought together a diverse array of stakeholders. An increased emphasis on purposeful 'kitchen table conversations' between farmers and agency staff has provided for more grounded and two-way discussions.

New relationships have been formed, including an agreement between Awarua Rūnaka (Te Wai Parera Trust) and duck shooters regarding access to the Mahinga Kai Pā for their recreational activities and a joint consent application by Awarua Rūnaka and DOC for the Lagoon opening.

And then, there's the continuing relationship of the Partners' commitments to continuing to work together as part of 'Phase 2' WTW. A recognition from Ngāi Tahu that they are now 'exercising rangatiratanga within the context of supportive partners' is one of the most significant changes of the WTW programme to date.

3.2 ORGANISATIONAL OUTCOMES

The Whakamana Te Waituna programme brought together organisations into a new power sharing partnership structure. This partnership challenged partners to adapt their 'business as usual' systems, processes and ways of working to better support the shared aspirational outcomes and accommodate diverse cultural paradigms.

This arrangement sometimes strained and tested the relationships among the partners. However, these challenges also facilitated a deeper understanding of the institutional hurdles that can hinder change, which is key to achieving lasting systemic progress. It is important to recognise that the timeline for such organisational change is often underestimated. Some agencies may find it easier to adapt certain aspects of their processes quickly, while others might face lengthier processes of adjustment.

A large portion of work has been dedicated to altering the management regime for the lagoon opening. This has expanded the focus of the Waituna Catchment Liaison committee from purely drainage to broader ecological values. In an unprecedented move, Awarua Rūnaka and DOC are jointly seeking consent to manage the lagoon opening.

The ways that Te Rūnanga o Ngāi Tahu's Te Ao Turoa unit supports and engages with papatipu rūnaka in Murihiku is changing too, influenced in part by the experience of Waituna. Other rūnaka are also recognising the progress that can be achieved through partnering with other organisations.



Pikiraurohi - delivering on both cultural aspirations and catchment goals

The Whakamana Te Waituna (Trust) collaboration has significantly boosted the achievement of long held whānau aspirations for Waituna and its people.

Its 'environmental' objectives, to reduce contaminant flows in the catchment and change the management regime governing the lagoon opening, coalesce well with exercising kaitiakitanga, restoring mahinga kai species and reconnecting whānau with place.

Purchasing farmland around the lagoon to retire from farming (reducing contaminants) and creating a buffer for the lagoon (to accommodate higher 'healthier' lagoon levels) was also an opportunity to support mana whenua aspirations, including access to the lagoon and surrounds for cultural purposes, and reinstating the once abundant mahinga kai (taonga species).

What is seen as a big "win-win" was not all without its challenges though. Purchasing land in a small catchment community created tension and a degree of mistrust within the community of both the individual Trust partners, and the Trust itself.

But by June 2019, Awarua Rūnaka had formalised its Mahinga Kai Pā Plan and, the following year, 409 hectares of land and farm buildings were purchased and returned to Awarua Rūnaka via Te Wai Parera Trust (Wai Parera being the original name for the lagoon). On the 6th of February 2021 the Rūnaka welcomed the community at the official opening of Pikiraurohi, Te Pā Mahika Kai.

Since then, 22 hectares of ponds have been created for mahinga kai species development and eventual harvest by whānau. A total of 40 hectares of ponds are planned, providing habitat for species, including wading birds, "polishing" for catchment's water, and cultural education opportunities for whānau and the wider community.

Other significant investment includes the repurposing of the Pā's woolshed into an onsite hub for hosting people and, with Southland Institute of Technology (SIT), new whare are being built by rangatahi to support arts, cultural and education activities. And of course, there's more native planting to do, pest management to undertake and general farm / Pā management activities.

But alongside some of the more obvious achievements, the experience of working together with partners has built trust and relationships that are now flowing into other catchment work and growing the concept and approach. Mana whenua's Te Korowai and Ki Uta Ki Tai kaupapa are extending the collaborative approach of Whakamana Te Waituna further up the catchment and into other Murihiku catchments such as the Mataura, and Ngāi Tahu Rūnaka from other regions are also coming to visit the Pā and talk about the kaupapa and processes.

Photo: Tā Tipene O'Regan and Nicol Horrell celebrating the official opening of the mahika kai pā.

3.3 ECOLOGICAL OUTCOMES

Despite the long timeframe for seeing environmental 'state' changes, there are already positive changes to the ecological health of the catchment area. These changes are particularly visible in the riverbanks and in-stream habitats, and the changes to the management of the land surrounding the lagoon.

In terms of specific ecological outcomes, a range of successful interventions can be observed. The creation of fish habitats both in-stream and in the riparian zone signifies a critical step towards enhancing the ecological vitality of the catchment.

Carefully monitored as trials, these changes also support the continuous improvement of restoration practices that can be applied elsewhere. There has also been a substantial increase in the understanding of the giant kōkopu population, which now boasts the highest density in the country.

A key development has been the establishment of land buffers around the lagoon through staged land retirement and covenants, which serve as protective zones to maintain the ecological integrity of the lagoon.

New ponds and wetland areas have also been reestablished on the Mahinga Kai Pā, and riparian plantings have been carried out, both of which contribute to the restoration of the catchment's natural habitats.

The lagoon opening consent application now includes ecological health requirements alongside cultural values and drainage considerations, signalling a more holistic approach to managing the lagoon. Taken together, these ecological changes demonstrate the WTW programme's commitment to enhancing the ecological health of the catchment, building its resilience for future generations.

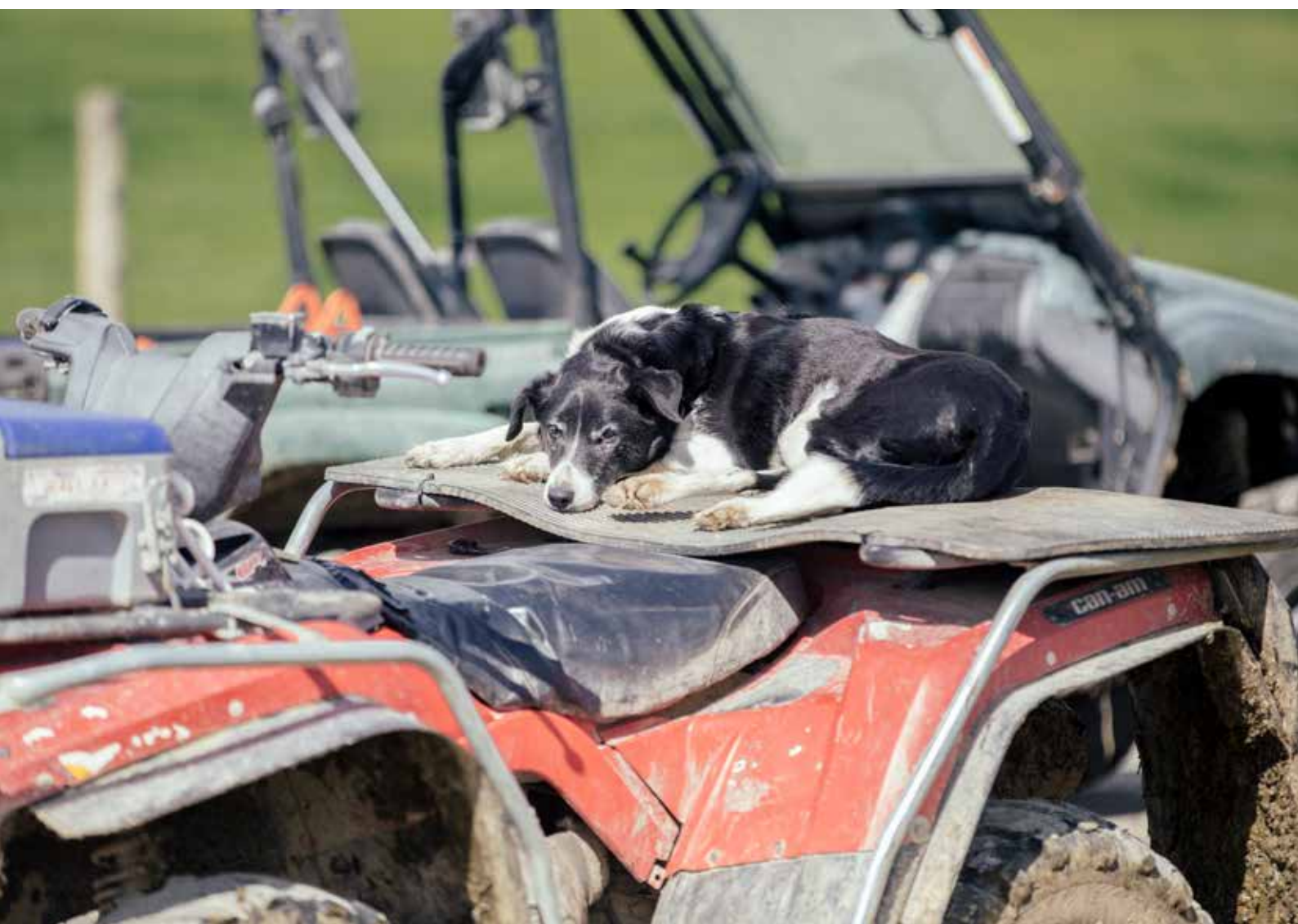
3.4 FARMER & ON-FARM OUTCOMES

The WTW programme has contributed to changes in farming practices and farmers' consciousness of biodiversity and sustainable land use. Staff have noticed that an increasing awareness of biodiversity has become evident in local farmers' discussions.

Tangible alterations in farming operations have also taken place. A significant improvement can be seen in winter grazing practices, a critical adjustment considering the environmental implications of traditional grazing methods.

There has been an increase in on-farm actions aimed at protecting and enhancing biodiversity, such as the planting and fencing of biodiversity sites, many of which have been supported by Whakamana Te Waituna funding. There is continued interest in on-farm sediment control structures and biofilters for nutrients that have been trialled at 6 sites.

Direct small-scale discussions with farmers about their ideas and further WTW contaminant reduction work has been positive. This willingness to engage with programme staff reflects a meaningful shift in perceptions about land stewardship obligations.



3.5 IWI & RŪNANGA OUTCOMES

The Whakamana Te Waituna programme as whole, has contributed to mana whenua achieving aspirations of accessing mahinga kai, reconnecting their people to place and being able to exercise their rangatiratanga and kaitiaki responsibilities.

Among the key outcomes achieved, the establishment of Te Wai Parera Trust and return of land to the Rūnaka (via the Trust) marked a significant milestone. The return of land has supported aspirations to develop a Mahinga Kai Pā to restore taonga species, provide kai for whānau, reconnect people, particularly rangatahi, to place and traditional practices.

This reconnection is already underway through education and training initiatives on the Pā, particularly habitat creation through onsite ponds and significant plantings. Other tangible changes on-the-ground include improvements made to the Pā woolshed to provide onsite hosting and hui facilities as well as the development of an onsite office hub.

Significant work undertaken through the WTW programme identified a lagoon management regime that balanced the requirement of cultural values and ecological health, with land drainage required for farming. This information supports a new partnership between Awarua Rūnaka and DOC as co-applicants to the Lagoon's opening consent.

The way mana whenua have worked with the programme and other partners is being viewed as a potential 'blueprint' by other rūnaka interested in reconnection, restoration, and mahinga kai development.



3.6 CAPABILITY & CAPACITY OUTCOMES

A collaborative undertaking, the Whakamana Te Waituna partnership represents the deliberate bringing together of different people and organisations with varied responsibilities, obligations, cultural perspectives, skills, and expertise. Each partner joined, recognising that they could not deliver the changes they aspired to in the catchment by themselves. The people, organisations and communities involved, have all extended their capabilities over the course of the programme.

In addition to technical skills, these capabilities refer to a deeper understanding of the local environment and cultural dynamics, as well as more nuanced skills in dispute resolution and governance. As such, the initiative has not only made strides towards its immediate environmental objectives but also invested in the long-term social capital and resilience of the community.

Specifically, the programme has led to an improved understanding of the Lagoon and catchment's cultural and ecological values and processes. This has been coupled with an exploration of different strategies to achieve a significant reduction in nutrient inputs into the lagoon. One of the key outcomes has been an increase in cultural awareness and shared understanding among the partners.

In terms of skill development, staff have built relational and engagement skills, gaining insights into caring for participants in collaborative processes, and acquiring competencies in managing conflict.

The programme has also provided governance training for Trustees, further strengthening the institutional capacity of the community. Taken together, these outcomes demonstrate the impact of the programme on the social skill sets within the community, enhancing their ability to collaboratively manage their catchment.

3.7 CONTRIBUTIONS (IN-KIND)

The significant FIF funding for the project was made possible due to the scale of the direct funding from the WTW programme partners. Much of this funding was available for land purchase to support programme outcomes. It is notable that this is a key opportunity not often available to restoration initiatives, yet as shown above directly supports a range of outcomes.

In kind contributions were not quantified alongside the direct funding commitments made by the partners at the beginning of the partnership. Over the course of the programme, some partners' contributions increased markedly out of necessity where capacity or capability elsewhere wasn't available.

In other cases, partners aligned other complementary work programmes within their organisation while others funded useful additional service delivery to capitalise on opportunities.

The programme's ability to leverage resources and catalyse broader initiatives has been instrumental in its success and holds promise for its future endeavours.

The Whakamana Te Waituna programme has played a pivotal role in not only mobilising resources from partner organisations but also in catalysing and scaling up the initiative to extend its reach beyond the immediate Waituna catchment.

This has been achieved through a judicious combination of leveraging existing resources, fostering collaborative networks, and inspiring similar initiatives across the wider Murihiku/Southland region. As such, the programme has demonstrated its potential as a catalyst for broader environmental and social transformation.

Mana whenua have been extending the collaborative approach of Whakamana te Waituna further up the catchment and into other Murihiku catchments and beyond, such as the Maitaha and Waitaki.

The DOC Fonterra Living Water partnership that works in five catchments throughout the country (including Waituna), are also taking the relationships, tools and approaches developed and tested in Waituna back into their agencies to inform further work programmes and collaborations.

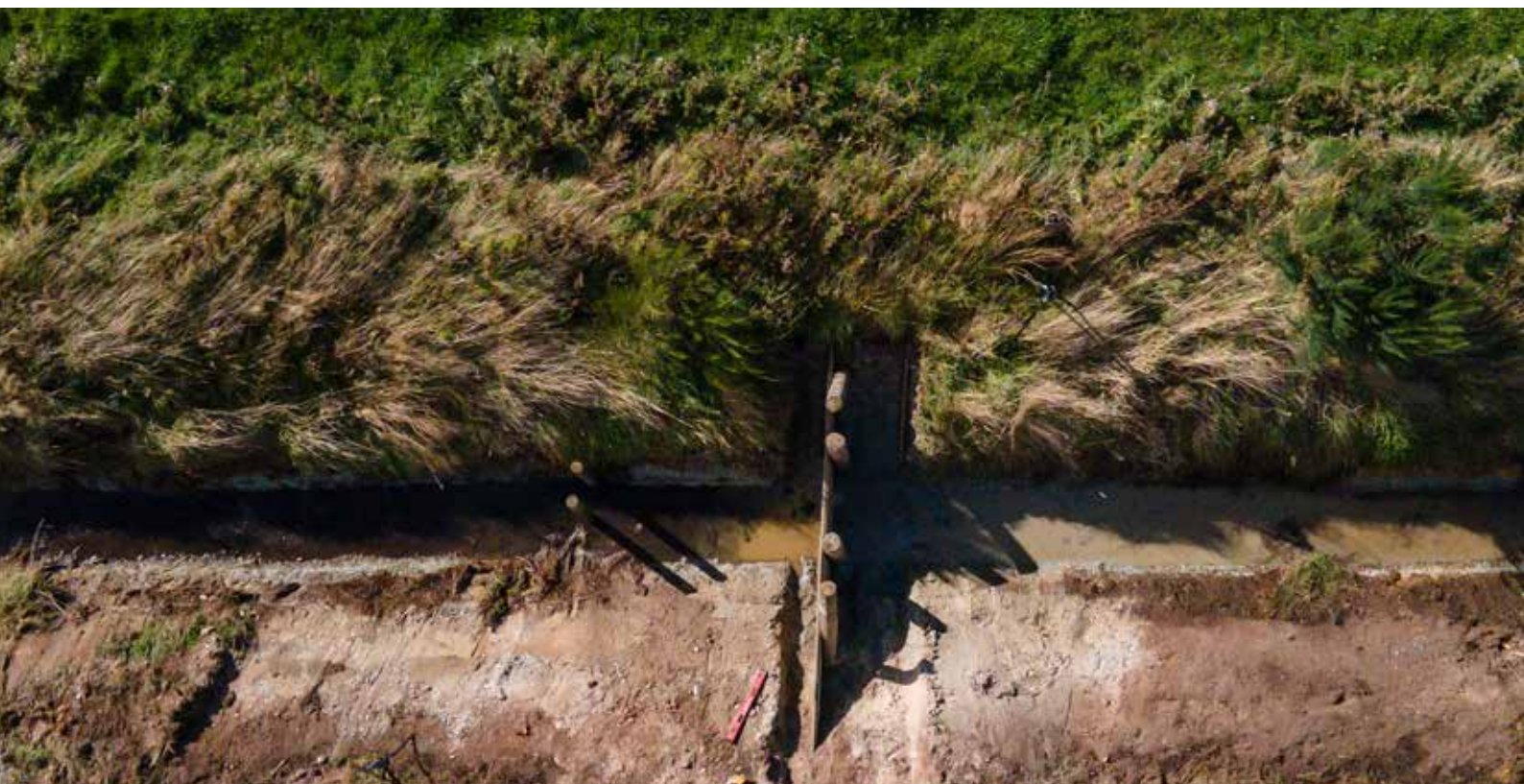
3.8 SCALING UP & OUT

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A peak runoff control structure during construction



4. KEY FINDINGS - Challenges, Insights & Lessons

This chapter aims to encapsulate the key learnings across the entire collaborative journey. It highlights the interconnectivity inherent in the programme's workstreams. While work has been organised into separate streams for practical management, the evaluation approach used here has stitched these 'pieces' back together. The reflections documented in this chapter underline the value of a holistic perspective.

The Whakamana Te Waituna programme has spanned over six years and provided a challenging and enriching educational experience for all involved partners.

The programme's trajectory over this time was shaped by embracing a multitude of 'learning opportunities'. Even though WTW objectives are complex and significant social-environmental changes are sought, considerable progress has been made towards the larger common goal. As a result of this work a number of significant intermediate outcomes have been achieved within a relatively short programme phase. This is despite the additional turmoil associated with the COVID-19 pandemic.

The programme's key learnings explore not only the direct outcomes and impacts of activities, but also acknowledge the range of the 'co-benefits' contributed. Each key finding section also highlights the challenges, insights, and the evolution of programme practices and approaches. These findings, while particularly pertinent to local and regional councils and central government agencies, offer valuable insights for a broader audience. The lessons learnt from this journey are valuable for those involved in a range of environmental and community-oriented partnership endeavours, co-governance and co-management schemes, integrated catchment management, and resilience planning.

4.1 INVESTING IN PARTNERSHIPS

Working in the partnership required an investment of skills and resources that was challenging, but also rewarding, for the partners.

Engaging in the partnership necessitated a demanding yet fulfilling commitment of skills and resources. Despite partners' prior experience in collaborations, the WTW programme's broad scope, intricate nature, and ambitious timelines often overwhelmed the available capacity and capabilities, slowing the collective progress.

Co-benefits

Working in the partnership has provided many benefits, beyond the immediate work programme. Many of these relate to the building of trust through action and appreciating contexts that are foundational components of successful collaboration.

- Beyond the immediate work programme, the partnership yielded a number of benefits. Some of these were related to the general trust-building activities and the understanding of contextual nuances that are vital for successful collaboration. As a result of these collaborative efforts, each other's values were better understood, fostering individual connections and a stronger contextual foundation for the project.
- The development of high trust relationships has the potential to be applied to other projects with a reduction in costs and enhancement in efficiency. For example, Fonterra and Iwi are now collaborating on the Re-imagining the Mataura project.
- The partnership amplified the 'mana whenua voice,' providing partners with first-hand experience of co-governance in practice. Shared operational protocols for utilising resources were developed, contributing to organisational adaptability and change. In-kind contributions from all partners enabled the programme to achieve a larger scale without imposing additional direct costs on the Trust.

Insights, challenges, and lessons

The partnership was challenging and demanding of the people and agencies involved, internally as a Trust, and within the communities of the catchment.

1. The governance, management and delivery of the programme created tensions between the partner organisations. While this was reviewed and improved over the course of the partnership, it highlights the value of strong, inclusive, and respectful leadership, and for partners to commit to working in different ways and adapting their 'business as usual' processes to align with the shared work and shared power.

Each organisation needs to ensure that the appropriate people/teams within their own organisation understand the programme's aims and processes alongside their role and commitments to it. This also requires clear and transparent planning within each organisation.

2. The original programme development did not plan or include enough funding (or commitment of in-kind support) for workstream leadership and implementation. For those contributing to the majority of workstreams or lacking dedicated project staff, this was a considerable challenge. In order to deliver successful services, capacity planning must include sufficient dedicated staff resources, as well as performance recognition mechanisms like key performance indicators.
3. Capability planning needs to ensure the right person at the right time. For collective initiatives seeking catchment improvement, key skill sets need to go beyond technical competences. In addition to social and organisational skills, they require relationship literacy, values alignment, resilience, and cooperation-oriented work principles, among other skills. Relational roles specific to each location should be prioritised to cultivate strong community and partner relationships.
4. For some, the programme posed a lonely challenge, especially for those who were the sole full-time contributors from their organisations. While a shared vision among programme staff eased these hardships, it is imperative to pay more attention to staff well-being in these collaborative ventures.

4.2 CONTRIBUTING TO MANA WHENUA ASPIRATIONS

The WTW programme has supported significant progress by Awarua Rūnaka towards achieving their aspirations for the Waituna catchment.

There is agreement and recognition by all the partners that the contribution made to Rūnaka and iwi aspirations is a significant achievement of the programme so far. These aspirations were woven into the development of the joint programme, and the Rūnaka was clear and ambitious about what could be achieved. This included a mahinga kai pā development, taonga species restoration, reconnecting whānau to place and working with others to create linked opportunities. Much of this has been achieved or significantly advanced.

Co-benefits

Aligning with the aspirations of mana whenua and Iwi partners not only supported Rūnaka initiatives, but also contributed to advancing a range of collective programme ambitions.

- Returning land to mana whenua supported the development of the Mahinga Kai Pā, has facilitated the land use change needed for catchment/lagoon health improvement and provided options for contaminant mitigation at the catchment scale.
- For the organisation and sector partners, working closely with mana whenua enhanced mutual understanding and provided valuable experience in co-governance. The resulting trust that has been built has supported the development of other joint catchment initiatives (such as Mataura). The Rūnaka has also fostered positive relationships with a variety of groups, including duck shooters and school groups.
- A Rūnaka partnership with SIT is developing physical infrastructure (learning centre buildings) for the Pā, and training and reconnecting young people from across Murihiku, to the place and kaupapa.
- The programme has also enabled Rūnaka/Iwi job creation, training, and expertise sharing through entities like Te Tapu o Tane, benefiting catchment restoration work. Other Rūnaka and Te Rūnanga o Ngāi Tahu are drawing lessons from Awarua Rūnaka's experiences for potential application in other areas.
- The development of 22 hectares of ponds on the Pā is contributing to mahinga kai species development and eventual harvesting. This also creates habitat for other species, including wading birds, and more ponding further up the catchment is planned.

- Opportunities for the Murihiku joint rūnaka enterprise, Te Tapu o Tāne, are adding to the ‘tapestry’ of linkages, including through ponding development, weeding, fencing, and planting plans.

Insights, Challenges & Lessons

Mana whenua aspirations and mamae (hurt) associated with Waituna have been long held. WTW provided an opportunity to progress and address those within relationships. Partnering with others, each with their own reputation and ways of working, was always going to be challenging, but has been worth it, not only in terms of progress made, but also what else has been catalysed into the future (the ripple effect).

1. Whakamana Te Waituna has supported the Rūnaka’s achievement of some of their long-held aspirations and helped progress others. This includes providing multiple ways for the whānau (and wider community) to rebuild connections with the place, its history, and traditional practices.
2. Mana whenua have made significant “in-kind” contributions to the project, especially given the size of the Rūnaka organisation. Their contributions also came with considerable responsibility and expectations, especially for roles such as co-chair and workstream leadership, and these expectations sometimes blocked the pathway to collaboration.
3. In order to engage the right people at the right time, and to foster a collaborative environment, strategic thinking is essential at an operational level. In the programme and partnership, fostering an inclusive, collaborative culture is key, with project partners working together to address any form of discrimination. This also requires an understanding of how to use social media to manage communication and engagement.

4.3 INTEGRATED PLANNING

There is a need to better recognise the interconnection of the social and technical aspects of activities in [project] planning and implementation processes to support catchment transformations.

To facilitate catchment transformations, it's crucial to understand and account for the intertwined links between social and technical aspects in planning and implementing project activities. While the WTW programme team acknowledged that most activities resulting in altered catchment management practices involve both dimensions, the conventional project planning and execution processes often inadequately integrate these with technical, science-based components.

Co-benefits

Key social components such as understanding socio-cultural contexts (histories, issues, aspirations, reputation, cultural norms), and developing skills like communication, teamwork, conflict resolution, negotiation, cultural competence, and emotional intelligence can reinforce practice changes leading to improved environmental 'states'. Incorporating these components as part of the 'technical' aspects in project planning, implementation, and reporting processes enhances effectiveness. The benefits of this integrated approach include:

- Improved stakeholder engagement, integrating local needs, and improving programme design and implementation.
- Preparation and anticipation of potential problems. Conflict resolution and negotiation potential to reduce conflicts and delays.
- Enhancing resilience and adaptability by strengthening networks and relationships.
- The ability to transfer social skills to other projects and goals could reduce costs and speed up the implementation of similar community-based initiatives.

Insights, Challenges & Lessons

Rather than only focusing on tasks for individual 'technical' workstreams, it is necessary to reflect on the comprehensive work programme as a whole. The planning, implementation, and reporting of traditional projects do not fully acknowledge the role of social and institutional factors in change processes. Although relationships are critical to achieving outcomes, they take time to develop.

1. The initiation of the programme, although seemingly mandated, was marked by insufficient engagement with the wider community. This perceived mandate originated from the partners (councils, central government, industry, and iwi groups) each of whom represents a significant portion of the community in its own manner. This has meant the Trust has been viewed at times as a collection of disparate partners rather than a cohesive entity. It's necessary to foster trust within the organisation and towards the community, an undertaking that calls for courage and engaging in challenging dialogues. It is also crucial to ascertain the community's expectations and align the programme's actions accordingly.
2. Establishing a comprehensive initial plan that is understood and supported by all programme partners is crucial. Equally, gaining an understanding of the community's vision(s) is vital.
3. The importance of accurately determining the required personnel resources at the outset of the programme is an important reminder for good planning and resource allocation. Throughout the programme certain partners were required to expand their staff contributions to compensate for the insufficient quantification of in-kind contributions, as compared to initial funding promises.
4. Effective communication and accessible language are vital for long-term ecological change. This may require effective translators/intermediaries who can bridge across various knowledge cultures and management systems. Thoughtfully designing future paths and considering changes in people and organisations are key to achieving lasting ecological outcomes.
5. Achieving the programme's bold environmental targets necessitates more integrated planning and emphasis on 'intermediate' outcomes /results. These intermediate outcomes could include initial changes like an increased understanding among stakeholders, improved abilities, and skills training. All of these outcomes are necessary steps that contribute over time to practices and behaviours changing.
6. Maintaining adaptability is crucial to enable the programme to respond to changes in decision-making contexts and take advantage of emerging opportunities as they arise.

4.4 ENGAGING COMMUNITIES

Working with the catchment community was complex and multi-faceted - and requires a multitude of communication and engagement activities and responsiveness.

The WTW programme acknowledges ongoing challenges in community involvement, underlining the need for better-planned interactions that accommodate a wide range of perspectives. Engaging communities in the catchment area proved to be a complex and multi-layered task, requiring diverse communication and engagement strategies coupled with an agile response mechanism. Simple, one-directional messaging about the Trust's activities is insufficient; successful engagement fosters relationships, stimulates dialogue, and spurs collective action.

Co-benefits

Despite the challenges encountered, several crucial lessons emerged that will shape future directions. Whakamana Te Waituna's success depends on community involvement. Some of these lessons point to areas where agency and community engagement can be further improved.

- Conversations with the community must be two-way if practices and attitudes are to change in the catchment. By valuing community insights and fostering trust, this can foster strong, reciprocal relationships and facilitate collaborative strategies to address shared problems.
- In order to build strong community relationships, you have to work together. As a group, you can harness different viewpoints to make decisions and foster a sense of purpose.
- Changing social and environmental landscapes will inevitably lead to difficult conversations. But by listening with empathy and negotiating respectfully, conflict can be effectively managed and stronger community relationships can be built.

Insights, Challenges & Lessons

Engaging with the community on some levels has been fraught and difficult. The programme's approach and planning need to change to better serve the purpose and desired outcomes of the Trust and communities.

1. When Whakamana Te Waituna started, the programme defined "the community" in a very narrow context, focusing on farms that could flood. In the meantime, the programme has grown to understand the community, realising how important it is to meet the communication needs of all the people in the catchment area.

2. Community engagement and communication are different; both elements are essential and need to complement each other. Agencies need to genuinely understand the community's problems and potential solutions as part of designing a full-fledged strategy for change and decision-making. The main focus should be on how the activities improve the quality of outcomes, rather than just ticking off engagement tasks.
3. In challenging situations, small scale and one-on-one engagement can be more effective than community meetings. Moreover, everyday interactions should be recognized and supported as essential components of "community engagement," and team progress in this area should be acknowledged positively as it happens.
4. Certain activities in programmes may exacerbate community tensions. In the Whakamana Te Waituna programme, the land purchases and lagoon consent are examples. On reflection, it's clear that these aspects could have benefited from more careful and considered communication.
5. Agencies need to be better prepared for difficult conversations in the wider community. This means addressing disruptive or disrespectful behaviours. Effective strategies are also needed to manage social media, and to ensure staff and community safety and manage conflict in meetings and in the field are necessary.
6. A dedicated community engagement leader or coordinator, who is truly passionate about the work, would greatly contribute to these efforts. This person should also be able to direct and support integration across workstreams.

4.5 RIGHT LAND, RIGHT PLACE

Getting the right land (and land use) in the right place is key to achieving the wider catchment vision.

In order to realise the broader catchment vision, it is necessary to secure appropriate land and utilise it appropriately. In addition to supporting Rūnaka kaitiakitanga and rangatiratanga, the acquisition of land surrounding the lagoon underscored how important it is to designate natural habitats. As expected, the partners' and the external funder's (MFE) largest investment was the purchase of the land. As a result of the change in land ownership and primary purpose, several aspects of the programme vision were enabled.

Co-benefits

A variety of socio-cultural, economic, and environmental benefits have been achieved through the acquisition of suitable land. Some of these benefits include:

- A substantial amount of external funding has been injected into the local farming community through this project.
- Land ownership has made it possible for mana whenua to reclaim their ancestral land, strengthening their ties to their ancestral lands, and enabling them to meet their kaitiaki responsibilities. This ownership has also contributed positively towards a perceived change in the status of mana whenua within the catchment.
- The phased withdrawal of land from agricultural use around the margins of the lagoon has provided a buffer to reduce the risk of contamination infiltration into the lagoon.
- Changing land use in this way has assisted in the development of more community interaction opportunities and increasing community connections with mana whenua within the catchment and on the Pā site.

Insights, Challenges & Lessons

The process to acquire parcels of land around the Lagoon was fraught with difficulties, yet it offers crucial insights for future initiatives. Key lessons include:

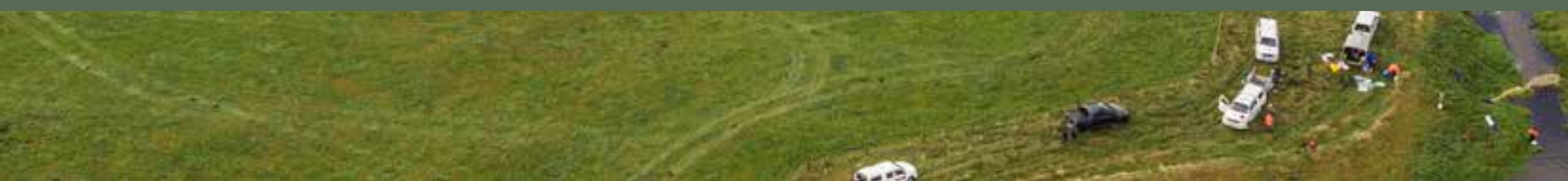
1. Determining suitable blocks of land to address ecological concerns can be challenging due to incomplete knowledge and the difficulty in acquiring land.
2. Research was essential in guiding strategic land purchases, especially on a restricted budget. In this case the research identified the lagoon levels needed to support its ecological and cultural health (and to avoid it 'flipping') meaning that

land at most risk of flooding if the Lagoon opening levels were increased beyond those currently in place, could be prioritised for purchase. The research pointed to lagoon levels essential for preserving its health. If these levels rise, it could lead to flooding in certain areas, which should then be prioritized for acquisition.

3. Land acquisition processes can hinder full engagement with the catchment community, affecting trust-building and constructive engagement. Clear and agreed messaging can enhance community engagement during this period.
4. Different land purchase approaches by lead agencies created intra-partnership tensions. Land negotiations should be transparent and open among the partners so they understand what is occurring. Partners also need to think carefully about the 'value' of land to the project and the community - some of those aspects may be missed by 'independent' market appraisal/assessment.



Waituna Creek looking south towards the Lagoon, showing areas where the two stage channels, instream habitat structures and plantings were undertaken, along with the Marshall Road property purchase



4.6 FARM & CATCHMENT RESILIENCE

The WTW programme contributed to farming and catchment community development and resilience.

The programme aims to contribute to the enhancement and resilience of the Waituna farming and catchment communities. The programme has made substantial investments in finding ways to improve collective action so farming can adapt to climatic change and environmental impacts. The purchase and retirement of farmland around the lagoon, amplified farm planning advice, and on-farm planting and trials have collectively boosted on-farm and catchment community resilience.

Co-benefits

The programme is proactively contributing to work in the catchment that helps farmers to meet the growing expectations of local and international consumers for ethical and sustainable food choices, maintain a 'social licence to operate', and front-foot upcoming policy and regulatory changes, such as Freshwater Farm Plans in Southland (and the Waikato).

- The programme has channelled significant funding into the catchment community and surrounding areas for land purchase, environmental restoration, contaminant reduction trials, and other initiatives. More room has been provided for nature in the catchment.
- The research conducted and shared with the community offers invaluable insights into catchment resilience, providing a resource for community members and other stakeholders.
- The programme has fostered closer ties among a range of agency partners, paving the way for more coordinated and tailored responses to catchment needs in the future.
- Understanding the cost of different tools and approaches to reducing environmental impacts from farming is important, and the programme has focused on both on-farm and catchment-scale strategies to reduce contaminant flows. A Cost Benefit Analysis suggests that while short term costs are higher, catchment-scale work is better economically in the medium to long term than a farm-by-farm approach in the Waituna catchment.
- The fast-tracking and improvement of farm planning processes, service coordination, and delivery further add to the project's benefits. This gave farmers in the catchment access to greater resources and knowledge to reduce their business risk in terms of future environmental regulations.

Insights, Challenges & Lessons

This section outlines some different aspects of community resilience, like community engagement, skill development, and change management, along with the value of research and strategic planning.

1. A more community-focused approach would have strengthened community participation and ownership. The programme's results-oriented approach sometimes overshadowed and outpaced community engagement - it is vital for the community to be actively involved in the process.
2. Improved social skills like conflict management and leadership can help catchment agencies and communities more effectively tackle local issues, fostering inclusivity and cooperation.
3. As part of the land acquisition process, research and strategic planning were heavily emphasised. This focus promoted informed decision-making, resilience, and lifelong learning, while also encouraging innovation.
4. Communities need to understand that catchment resilience is built on relationships and ecological restoration. Resilience can't be achieved in 5 years, so there's more to do and we'll see more of the results in the future.



On-farm riparian planting to help bank stability and biodiversity



Contaminant reduction: Working with the farming community and beyond

The Whakamana Te Waituna programme aims to reduce contaminants entering the lagoon and its tributaries. There have been a number of complementary approaches taken to develop catchment-appropriate solutions. The design and use of these has been developed from the collective knowledge, experience, and skills of partners, Rūnaka whānau, farmers, land managers, and scientists.

Farmers played a pivotal role in the programme, both on their farms and beyond. They engaged in dialogues about managing the lagoon and reducing contaminants, actively participating in initiatives like on-farm riparian plantings and fencing off native bush areas.

The programme provided on-farm support through planning, advisory services, and grants. Over 25,000 plants were added through these initiatives.

Farmers collaborated with programme staff to trial sediment and nutrient reduction devices, aligning with the programme's goal to minimise contaminant losses.

The programme witnessed the creation of 61 farm environment plans, embedding updated information and management actions to bolster water quality and biodiversity. Environmental improvements can be observed in farming operations, especially in winter grazing practices to address environmental concerns. On-farm sediment control structures and nutrient biofilters gained traction, as their effectiveness was tested at six sites.

Furthermore, the programme concentrated on larger scale interventions, like the re-establishment of wetlands on a catchment scale, to further decrease contaminants. Research findings guided these interventions, promoting sustainable land management practices on both private and public lands, significantly reducing contaminants in the lagoon. Through this work programme staff have created a template that can be applied across the country.

Photo: Fonterra Sustainable Daiying Advisor talked with families through the programme

5. PROGRESS ASSESSMENT & RECOMMENDATIONS

The Whakamana Te Waituna vision is “ensuring the wellbeing of the people, the land, the waters, the ecosystems and the life-force of Waituna”. In this chapter we assess the intermediate outcomes that have been achieved to date. We then note the programme’s contribution to the social, cultural, economic, and environmental well-being of the Waituna catchment and its communities. Finally, we provide a set of recommendations that could help future planning for WTW phase 2 as well as by individual partners working in the catchment.



Electric fishing survey in Waituna Creek to assess the impacts of stream restoration on fish populations

5.1 PROGRAMME PROGRESS

While acknowledging the vision as aspirational, the programme's FIF funding application pointed to four key intermediate outcomes as anticipated markers of progress. These outcomes are best viewed as stages in a journey, rather than rigid end points to be reached. In this section, we provide a brief analysis on the progress made towards these intermediate outcomes. As evaluators, we observe significant strides being made towards the realisation of these outcomes.

Progress - Outcome 1: Re-establish the hydrological regime protecting the ecological, cultural, scientific and recreational values associated with Waituna Lagoon's status.

In 2017 a short-term Waituna Lagoon opening consent was sought (and granted) that included conditions related to higher summer lagoon levels and Spring-only openings to lessen ecological impact (of drainage). This was the first interim step towards a lagoon opening management regime change.

This short-term consent provided time for the development of a more comprehensive management regime that prioritised both ecological and cultural health to be developed and specified. The Department of Conservation (DOC) and Awarua Rūnaka sought resource consent in 2022 to manage the lagoon opening. This change was identified as one of the two critical science-backed pathways, alongside effective nutrient management, to restore the lagoon's health.

The consenting processes have driven significant research about the Waituna lagoon and catchment that has been shared with the community, and raised awareness of the issues and impacts of land use activities. They have also required challenging discussions and negotiations with the catchment community.

Community awareness, understanding and, to a degree, acceptance of the purpose, rationale and outcomes of the lagoon management regime change are important contributors to long-term outcomes.

Progress - Outcome 2: Provide alternative land-use options for the land adjacent to the lagoon, re-establishing the hydrological regime and protecting the lagoon values.

One of the most significant achievements in the small catchment community was the acquisition of 584 hectares of land for buffering purposes through a willing buyer, willing seller approach. The process includes a staged transition and retirement of land, which is secured through covenants.

A portion of the purchased farmland, spanning 409 hectares, is being developed as a mahinga kai pa by Awarua Rūnaka (Te Wai Parera land holding Trust). The transformation is progressing well, with the replacement of some pasture by extensive ponding (covering 17.5 hectares) and the implementation of extensive native plantings. Stock numbers have also been reduced, and the Te Wai Parera Trust is actively working on a management plan to guide further land conversion efforts.

Progress - Outcome 3: Demonstrate scalability of alternative drainage system design/ management and farm system interventions to reduce impacts of ground and surface water contaminants on Waituna Lagoon and its tributaries.

The programme has developed a range of alternative drainage system design/ management and farm system interventions to reduce the impacts of ground and surface water contaminants on Waituna Lagoon. This progress demonstrates a commitment to reducing contaminant impacts through scalable drainage system designs, farm interventions, and wetland infrastructure development.

Various tool trials have been conducted on farms, including biofilters, fine particle fertiliser application and peak runoff control structures with useful results helping understand factors influencing effectiveness. Significant efforts have also been made in riparian planting along the lower Waituna Creek (16,750 plants) and on farms (16,895 plants). Farm plans have been completed for a majority of the catchment properties, including 95 percent of dairy farms.

A constructed wetland is currently being developed, which is considered crucial to reducing contaminant flows into the lagoon. Catchment-scale constructed wetland investment was guided by a contaminant intervention plan, published in 2020. This plan has provided a framework for developing targeted actions and resource allocation.

Progress - Outcome 4: Re-establish Te Rūnanga o Awarua's connection and role as kaitiaki.

The return of land adjacent to the Lagoon for the development of a mahinga kai pā is hugely significant for Awarua Rūnaka. While only Awarua Rūnaka can really 'judge' the achievement of this outcome, project partners should (and do) recognise the significance of the partnership's contribution towards that. This contribution has been manifested in a number of ways including: co-governance of the Whakamana Te Waituna Trust, return of land purchased to the Rūnaka, support for maintenance and development of mahinga kai pā site infrastructure, and contracting of a joint Murihiku Rūnaka enterprise to undertake planting and maintenance work.

Whānau engaged in this evaluation process affirmed the significance of the partnership. It has supported the creation of a physical presence and recognised “stake” in the catchment for Awarua Rūnaka. It has also contributed to whānau, including rangatahi, engaging on site, learning and revitalising traditional knowledge and practices. As people distanced by issues including access to land and the poor state of taonga species and mahinga kai, they are now reconnecting with the place. The whānau are proud of what has been achieved through the partnership and are now looking further up the catchment and beyond to continue the mahi. They are also talking to their wider Ngāi Tahu whanaunga about how they have progressed their aspirations through this partnership approach and how something similar might work for others.



Land buffering serves as protective zones to maintain the ecological and cultural integrity of the Lagoon. Here we're looking south across the Lagoon towards Motupōhue (Bluff Hill)

5.2 QUADRUPLE BOTTOM LINE CONTRIBUTIONS

From a value for money perspective, the WTW programme has delivered significant value across the quadruple bottom line of social, economic, environmental, and cultural wellbeing. Through partnership and collective action, the programme has maximised the resources and grown the capabilities of its partners. This has resulted in outcomes that exceed their individual value through the leveraging that has been achieved through partnering.

The programme's investment in partnerships has led to significant co-benefits. Working closely with mana whenua has enhanced mutual understanding and provided valuable 'co-governance' and practical experience. This has bridged into other joint catchment projects and fostered positive relationships with a variety of groups. The programme has also enabled Rūnaka/Iwi job creation, training, and expertise sharing, benefiting catchment restoration work.

Similarly, the programme's contribution to mana whenua aspirations has led to significant social and cultural value. The programme has supported the Rūnaka's achievement of some long-held aspirations and helped progress others. This includes providing multiple ways for the whānau (and wider community) to rebuild connections with the place, its history, and traditional practices. The reconnection and affirmation of cultural identity, kinship ties and mātauranga has been of immeasurable positive benefit directly attributable to the Whakamana Te Waituna programme.

As a result of the programme, land use change has been facilitated for the improvement of catchment/lagoon health, and options have been developed for contaminant mitigation at the catchment level. Not only has this improved the ecological health of the catchment, but it has also enabled more resilient sustainable economic development. The programme's activities and outputs have resulted in significant ecological changes, including planting and fencing biodiversity sites to protect and enhance biodiversity on farms.

Among the significant improvements in capacity and capability for the individuals, organisations, and communities involved in the programme, the experience has heightened awareness of the need for more sophisticated skills in conflict resolution and governance, along with a deeper understanding of the local environment and cultural dynamics.

5.3 RECOMMENDATIONS

The WTW programme represents a comprehensive effort to balance the socio-cultural, economic, and environmental facets of catchment management. This review, particularly with the key findings (Chapter 4), provides valuable insights for similar initiatives, while also highlighting areas for a future phase of the WTW programme to refine.

The recommendations suggest more focus is needed on the often overlooked and under-valued intermediate outcomes (or “supporting structures”) required for progress towards more long-term environmental and social catchment goals.

Our recommendations are:

1. Strengthen inter-agency collaboration processes

The WTW programme places a strong emphasis on the importance of working in cross-sector partnerships. To strengthen group decision-making, responsibility sharing, and reciprocal accountability, each partner should review their internal organisational processes (with insights from other partners) to identify and address administrative and implementation barriers. Proactive and regular communication and information sharing among partners can improve programme results.

2. Strengthen alignment with cultural aspirations

Iwi and Rūnaka engagement and inclusion is a vital component of environmental governance, and it is a weighty workload for those responsible. Agencies and mana whenua should come together to discuss how to better support the capacity (and capability) needed to integrate mana whenua aspirations into activities and approaches to support the larger cultural goals of the collective

3. Enhance community engagement

The programme underscores the importance of acquiring suitable land in the right locations to realise broader catchment visions. It illustrates how strategic land acquisition can support socio-cultural, economic, and environmental values, while also acknowledging the difficulties associated with identifying and securing appropriate land.

4. Maintain a land acquisition strategy

Given the significance and difficulty of acquiring suitable land in the appropriate locations, partners should continue to think about options for locating, acquiring (funding), and managing lands that support a whole-of- catchment management strategy.

5. Diversify capability and capacity

Both technical and socio-cultural responses are essential in achieving significantly improved catchment management. Staff capacity-building in the water management sector requires both “hard” (technical) and “soft” (social) capacity. Typical technical capabilities and capacities are generally focused on the environment, facilities, equipment, and infrastructure. Required social capabilities and capacities include facilitation, integrity, effective coordination, and communication.

6. More emphasis on evaluation and adaptive management

Because catchment management is dynamic, flexibility is a key component. As part of working towards long-term change, the partner organisations should support a catchment culture in turn that supports participation, information sharing, and learning. Important progress indicators (intermediate outcomes) should be embedded in monitoring and evaluation systems and are an integral component of the wider management and decision-making. The M&E system should include formal programme review hold points that allow the partners to adjust delivery approaches.

Over the past several years, the WTW programme has given us examples - both successful and less successful - of the value of teamwork, communication and engagement, and integrated planning in responding to challenging catchment management issues. The conclusions and recommendations from this evaluation are intended to encourage the continuation of the comprehensive strategy, increasing the programme’s efficacy and potential for long-lasting positive outcomes.

We (the authors) appreciated this opportunity to return and review the project, and it was a pleasure to work with the project staff and partner representatives. The report highlights the many achievements that have been made because of the hard work and dedication of everyone involved. We spoke to many people who all demonstrated the qualities of a learning team. Both the programme’s challenges and successes were acknowledged, and they systematically sought out new ways to improve. Having this attitude has been a big part of the success of this project and will continue to be so in the future. Through ongoing learning, adaptation, and integration of these insights, we anticipate that integrated catchment management initiatives will continue to expand and be successful.

APPENDIX 1

Measures of Success for Key Outcome Areas (2018)

This table summarises what WTW members envisioned (in 2018) a successful Whakamana Te Waituna programme would contribute to in key outcome areas. It was acknowledged at the time that not only are many of the outcomes interlinked, but that these outcomes are long term and would not be fully realised within the life of the programme, but that the programme would contribute to short- and medium-term outcomes as necessary precursors to these.

What success looks like

Outcome Area: Leadership & Co-ordination

- The participating groups (and the wider Waituna catchment community) see that the partners (and their organisational colleagues) are demonstrating good partnership practice.
- The initiative demonstrates a successful (cross sector) partnership approach.
- Partner communications are co-ordinated and reinforcing – the community sees that they are “saying the same thing”.
- Budgets and work activities are “shared” across departments and organisations in a way that best supports the wider initiative.
- Partners exemplify innovative ways to manage contaminants leading the way in their activities on land under their management.
- There is a high level of community and partner engagement with the programme.
- The project has built leadership within the Waituna catchment community - and new leaders are well recognised within the project and starting to be recognised beyond the project.
- The wider Waituna catchment community want to continue Whakamana Te Waituna beyond the life of the project, and other agency staff and catchment communities are looking to replicate it elsewhere (self-sustaining).
- The project has left Partner and Iwi staff with more capability and skills in the process side of things (eg. there are standardised process guides within organisations and between organisations).
- Key agency staff continuity – staff still want to be a part of it.
- The Mahinga Kai Park is seen as a flagship project regionally and nationally.

Outcome Area: Iwi/Rūnanga Development

- (Recognising that the programme “contributes” to this):
- Whānau invested back into rohe – progress in the Mahinga Kai Park
- Social, cultural, economic, and environmental potential of the area is being unlocked and unleashed.
- Multiple projects on Rūnanga land – whānau enterprises growing.
- Taonga species thriving.
- Whānau taking on management and leadership roles in the region and beyond.
- Whānau visiting the catchment, and evidence of some employment.
- Education and tourism experiences grow.
- Not just a focus on mahinga kai.
- DoC, manawhenua and farmers engaging over pest management – creating linked approaches.
- Whānau were invested back into the area (new jobs, education, practices, social eg. waka ama, mahinga kai park – physical presence. [metrics active participation, customary practices, amount of land, hectares of land accessible])
- Whānau living on-site.
- Ngāi Tahu is able to line up behind papatipu rūnanga.

Outcome Area: Awareness & Engagement

- Increased awareness, and agreement with, programme aims across the wider Waituna catchment community.
- A common narrative around the programme – this is evidenced by people saying the same things. More evidence of common planning between key catchment players – iwi, sectors, agencies, other groups.
- Evidence that (some increased % of) farmers are actively involved in collective thinking about catchment water management (eg. through groups, field days, etc.).
- Clarity around actions that contribute to these aims. All those involved understand the contributions they can make to help achieve the broader goals (small, big or otherwise),
- All land managers are operating with the benefit of guidance from individualised land management plans that take account of risks to lagoon health.
- 60-70% of farmers are enabled - i.e. most farmers are actively contributing (by doing something) to programme aims – but over a range of things demonstrating evidence of change in a range of areas including contaminant minimisation (eg. adapting winter feed practices), pest management (eg. trapping), etc.
- There is an increase in hectares of land available for mahinga kai gathering (going beyond just Rūnanga land to include DoC land and farmland).

Outcome Area: Contaminant Reduction

- Tangible targets have been agreed, are developed, well-recognised – and beginning to be implemented.
- Farmers (eg. farmer reference group) and other groups are engaged in contaminant intervention planning research and trials.
- Trialled a few things and know what will and won't work – and how much they'll work (eg. doing this will achieve 20% reduction).
- Evidence of successful contaminant reduction from use of the contaminant intervention plan.
- Recognition by the farming sector of the action plan process as a way of achieving required contaminant reduction – rather than the process being lumped in with limits.
- Contaminant intervention is enough that it doesn't need regulation.
- The process and approach are recognised by relevant agencies in a policy space.
- A range of diverse groups and sectors are committed to this focus.
- Know that whatever farm plan is in place that it will be successfully reducing contamination.

Outcome Area: Biodiversity & Pest Management

- Catchment-wide understanding of where to protect areas of biodiversity (that are significant to area).
- Increased evidence of biodiversity awareness among farmers.
- High value biodiversity areas in the catchments are protected.
- Unified approaches to pest management are in place regardless of land ownership (public and private) – and between all parties (eg., DoC and farmers and iwi).
- Habitat creation progressing in areas prioritised as high with the community (eg. riparian plantings, wetland restoration).
- Taonga species are being managed/supported to thrive. Wider community understanding of biodiversity values.
- Preparing the community so they are ready for the wider discussions like Predator Free NZ (the ground-work is laid).
- Mahinga kai access and availability increased.
- Lagoon health improved.

Outcome Area: Lagoon Health & Hydrology

- Monitoring provides biophysical measures (DOC), plus social and cultural measures such as: Mana; Recreational/tourism; Mahinga kai; etc. Collectively this monitoring reflects the wider values inherent in the lagoon.
 - Regular routine integrated health update from partner agencies.
 - Partner agencies agree on the management required to support long term lagoon health and collectively support the community affected by this management.
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Outcome Area: Resilient Rural Community

- Farmers understand the upcoming challenges to farm viability and likely pathways forward are documented at both catchment level (eg. off-farm interventions) and on-farm (eg. Farm Environment Plans).
 - The Waituna farming community feeling part of the project.
 - Farmers are encouraged, recognised and supported as leaders – skills and opportunities build (provides for well-being – feeling in control).
 - Vibrant community social structures (eg. schools, country club) are maintained.
 - More holistic farm system planning – includes where interventions fit.
 - Interventions actively integrated into farming systems.
 - Evidence of a diverse catchment and livelihood view (reflecting the range of social perspectives involved).
 - Increased tourism numbers as the Lagoon water quality and biodiversity health improves, and interest grows in the site's cultural, natural and Ramsar iconic status.
 - Social, cultural and economic potential of the area is being unlocked and unleashed.
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APPENDIX 2

Information Sources for evaluation

Evaluation workshops:

- Initial feedback and scoping with Evaluation Team (made up of staff from ES, DOC, Fonterra and TRONT)
 - Biodiversity Outcomes workshop with staff from DOC, Fonterra & PMO
 - Awareness & Engagement & Rural Community Resilience Outcomes workshop with staff from Fonterra, DOC, ES & PMO
 - Contaminant Reduction & Lagoon Health & Hydrology Outcomes workshop with staff from Fonterra, DOC, SDC & PMO
 - Activities, Outcomes & key findings development workshop with Evaluation Team
 - Activities, Outcomes & Key Findings workshop with WTW Trustees and programme staff
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Reflection Session with Awarua whānau (including Te Wai Parera Trust, Te Rūnanga o Awarua and Marae trustees)

One-on-one semi-structured sessions with staff from:

- Environment Southland
 - Fonterra
 - DOC
 - TRONT
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Other key information sources:

- WTW Trust Strategy Session, July 2022
- WTW Quarterly and Annual Reports to MFE (2018 - 2023)
- Review of Whakamana Te Waituna Governance (2020)

Allen W, Sherwood V, Bright J and Whakamana Te Waituna Joint Officials Group (2019) Whakamana Te Waituna: Monitoring & Evaluation Programme and Action Plan, Working Version 1: 26 April 2019 (Internal report)

Taylor, C.N., McClintock, W., and Mackay, M. (2015). Social assessment of the Waituna Catchment, Southland – anticipating the impacts of nutrient limits for farming systems. A report for DairyNZ. Taylor Baines and Associates.

Wedderburn, L (2015) Determining Community Values for the Waituna Catchment and Lagoon. Report prepared for Environment Southland, DairyNZ and the Department of Conservation

