



OUR LAND AND WATER

HE MANAWA PIHARAU

SYMPOSIUM 2024

Ka Manawa Piharau tō Rataau: Workshop Summary

Jenny Webster-Brown, Susie McKeague, Bill Kaye-Blake, Helen Percy, Ceridwyn Roberts

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At the close of the final Our Land and Water Symposium, our MC, Johny O'Donnell, spoke of the migratory habits of kūaka (godwits). Every year, these birds complete the cycle of their long journey from the great Siberian and Alaskan tundra, passing over Hawaiki moana to return to the rich feeding grounds of Aotearoa's tidal flats and coastal marshes. When the kūaka leave Aotearoa, it's not just an ending but a beginning. Haere ake nei.

The final element of the symposium involved three facilitated workshops where all participants were encouraged to share their thoughts and hopes for the future direction of land and water research in Aotearoa.

Into the Future: Making Connections to Take the Responsibility Forward

1. **Where Should We Go From Here?**

How do we harness this collective to support a more united approach for the food and fibre sectors? What do we have already (policies, plans, visions)? What role can we play individually and collectively? Facilitator: Bill Kaye-Blake

2. **Future Research Programmes**

How do we do our research in the future? What research do we still need? What relationships, organisations and structures could enable this? Facilitator: Helen Percy

3. **Implementation**

How do we collectively continue to implement what has been started (for example, what are the roles of catchment-led initiatives)? What is needed for this to happen, and who needs to be involved? Facilitator: Susie McKeague

This document summarises the discussions in these three workshops, supplemented by quotes from across the event. In summary:

**Our Land and Water has left an indelible legacy.
The levers are there for change.**

Where to next?

Participants in the **‘Where Should We Go From Here?’** workshop want mission-led science to continue influencing how we work with communities and make meaningful change. To persist in tackling complex real-world problems, we need to keep societal wellbeing at the heart of this work.

What’s already supporting change?

While the science system is currently experiencing turbulent times, there is policy in place and current policy recommendations that support Our Land and Water research into the future. This includes the recent Parliamentary Commissioner for the Environment’s recommendations on freshwater models and land-use (Parliamentary Commissioner for the Environment, 2024; 2024a) , and ongoing policy work on scope 3 emissions.

We’ve worked hard across industries, political views, and professions to create and nurture relationships. People may disagree as to the ‘how’ but there are a huge number of people all advocating for similar things – sustainability and the health of te Taiao. Harnessing these values is now easier, due to the tools Our Land and Water researchers created, which will enable informed decision making if there is a desire to create change.

“We don’t have time anymore for long-term research that is disconnected from the practice.”
– Tina Porou

Financing the change

Change brings with it an opportunity to reshuffle and shake things up, improving how we work with communities, end-users, and other researchers. Participants in this workshop reported that Our Land and Water has promoted ways of working that led to science success and real-world impacts. Many of these new ways of working involve small amounts of funding compared to more traditional science.

While government and project funding are still important, we need to look wider and broader. Banks are grappling with scope 3 emissions, and we could be reaching out and offering solutions. Sustainability is a huge part of business, and we can reach out to business owners who are focused on wellbeing for staff and customers.

“The funding system needs to allow for small, hapū instead of reaching for a national workplan and system ... [we] require small boutique solutions rather than monoculture, so diverse funding systems are required.”
– John Reid

Being part of the change

In the land and water space there are many different ideologies and farming systems. These can lead to conflict, but the diversity of perspectives, skills and knowledge is vital. The focus for change should be on the ground in farming businesses and catchment groups.

We all need to take responsibility for the ongoing implementation of the science and work towards improved awa and whenua. Everyone has a role in staying connected and maintaining the relationships that have been catalysed and nurtured by the Our Land and Water Challenge. Relationships built on a foundation of trust create a foundation for change.

Key to any shift in direction is passion and leadership – people who will champion the future we need and want. These people need to be identified and supported to role model trusted examples of how farmers can attain a sustainable, profitable farm. A network of champions who are community connectors could share knowledge across wider communities and take the issues to policymakers.

“If we share the success of the leaders and how they achieved it we can communicate with people further down the bell curve and build social license.” – Erin Harvie

Catchment groups

Every catchment group is different, with varied abilities, resources and challenges (Kaye-Blake, 2024). However, catchment groups are in prime position to act as catalysts for change. They can support local initiatives and action plans and respond to the unique values of their communities.

There may be an opportunity to bring together a variety of different funders to allow catchment groups to harness their contacts, knowledge, skills, and achievements. However, leadership from within the rural sector is required to continue their momentum.

“Catchment groups are vital because farmers learning from farmers makes things go quicker.”
– John Burke

Tools for change

Our Land and Water researchers created many tools to help people make decisions (see ourlandandwater.nz/resources). Participants in this workshop felt this type of information combined with local thinking builds hope and inspiration to provide the energy for change. It is now time to collaborate so we can normalise and share these tools across different audiences. Providing instructions detailing what is useful for which audience could help guide end-users in how best to apply the tools.

The existing tools will also require ongoing maintenance and may need further research to remain relevant.

“Most farmers are already thinking about the kinds of land use change they might need in incremental ways to derisk. We need to provide information that is both sophisticated and integrated and allows people to choose how to change.” – Lee Matheson

What research do we still need?

Participants in the **‘Future Research Programmes’** workshop were clear that the question of what we still need to research can’t be answered in isolation. Collaborative discussions have power, especially when we are asking not just **WHAT** research we need, but **WHO** needs it, and **WHY**?

Note: The points below are summarised from suggestions made by individuals or small groups and should be considered in that context rather than as a definitive list of research gaps.

Land use and transition

A core focus for the future should be on implementing research to match land use to local environments, and to identify the right management and mitigation options. Improved monitoring data, based on better monitoring programme design, will enable the effects of interventions and alternative and adaptive management approaches to be assessed.

Social and economic research, engaging landowners and their advisors, would identify options for equitable land-use transition. In a constantly changing policy context, we need to find ways to move beyond a regulation and limit-setting mindset, to adaptive management prioritising environmental outcomes.

“The best way of getting change is multiple ways of getting change. Not all will work, but several will and that will help.” – Denise Bewsell

Mātauranga

Researchers need to continue their journey to understand and appreciate the strengths of the different knowledge systems contributing to land and water management in Aotearoa New Zealand. Both mātauranga Māori and Western science are knowledge systems with more than 500 years of history and development. The practicalities of farming reach back millennia. Relationships built on mutual respect have the potential to yield the most effective solutions.

We need to do more work to understand how to transition from conventional farming systems to a tikanga-led regenerative estate. This will require new tools, data, knowledge, and capability. It will also require policy changes that are more than tinkering about the edges, that support intergenerational strategy. The health of the water should drive the research, then health of people, then the needs of industry.

“We can be an exemplar for the world where we are learning from effective Māori organisations and indigenise our primary industry.”
– John Reid

Long term monitoring and datasets

We need long-term research into the effectiveness of on farm mitigations in improving water quality and the ecological state of waterways.

We also shouldn't forget the need for research to support ongoing development and improvement of environmental datasets that underpin monitoring and research. These datasets need to be extended to catchment and sub-catchment scales to allow application by individual farms. Any new datasets must be auditable and should not duplicate already extant material.

“There are tremendous opportunities to bring all data together and look at where we want to be, where we were and where we are.”
– Mandy Bell

Farm scale and farm systems

Much of the change needed for the future will come at the farm level. This means funding for applying and implementing research. A holistic approach is required that connects water quality improvement to greenhouse gas mitigation, soil health, resilience, and climate change adaptation.

“We need a vision and mapping at catchment scale to inform farmers what needs to happen. This could include everything from where to place trees and what trees to plant, maramataka and mātauranga Māori considerations, and firebreaks.” – John Burke

Economic and social impacts

Valuing ecosystems services and biodiversity is a focus worldwide. Aotearoa needs to keep up in financially supporting our journey to improved environmental quality. A key aim should be broad cross-party support for future policies, to enable certainty and planning.

We should work with our Pacific neighbours, who are technology-poor and often rely on external funding. Perhaps we can help the Pacific improve their farm efficiency while absorbing lessons on how to work with less and under climate stress.

Understanding more about the economic and social impact of policy changes in rural communities is critical. We need more political science on different governance systems for different contexts, along with more policy-oriented economists who can provide insights on how to deliver true-cost pricing.

“Don't see innovation as risk, see financial input as investment with long-term returns.”
– John Reid

How do we do our research in the future?

Participants in the **‘Implementation’** workshop expressed a wish to continue working in ways the National Science Challenges encouraged. This is exemplified by the promise of a better implementation of research outcomes generated through collaboration, flexibility, and diversification (Hazel, 2024).

Collaboration

Respectful collaboration between holders of disparate knowledge allows us to broaden our understanding of research. Diverse teams of people working in high-trust environments can create innovation and impact that leads to positive change. There was a strong call to include community voices and rangitahi in setting vision and direction, as this increases both energy and understanding at a local level. Much of the applied research needed by industry, catchment groups, regional councils and communities still needs to be underpinned by publications in academic journals to provide credibility and quality assurance.

When different ideologies and values come together it is important to build trust and acceptance by creating a space where all are comfortable and respected. We need to reach beyond the already funded and already converted to the non-usual suspects. If we link into (and potentially fund) those less connected, we may find undiscovered gems as well as ways to reconcile values.

“The organisations and structures are not so important – there are ways to work across and between them. Most important of all are the relationships.” – Workshop participant

Centring te ao Māori

Respecting and including te ao Māori in any agricultural research should involve getting your boots on the ground, getting involved with catchments, and getting on the whenua. It also requires tough discussions about the history of our land and the hurt of the past that then allows us to understand one another and sit with our differences.

A Māori stream of funding that provides hapū and iwi with mana motuhake in their kaupapa is necessary for an innovative approach to research. This will allow the massive strengths of mana whenua and local marae to connect with landowners. The outcomes of this kind of process need to be recognised and valued equally alongside more academic research and research publications.

Joined up and integrated

We now know the value of embracing complex research and its inherent interdisciplinarity. We must continue to focus on how the research ties together to ensure we don't lose out on insights that come from a joined-up practice. This is crucial as we work together to find ways to use technology and artificial intelligence (AI) in ways that are reliable, trustworthy, and easily shared.

Research needs to be synthesised across research disciplines but also across hapū and iwi, community partners, industry, end-users and policymakers. We need people who can help us apply the research: commercial entities, communications and engagement experts, and NGOs.

“We need to bring a diverse range of people to the research table so we can understand the needs and diversity of views.” – Oliver Ausseil

Flexible and quick

Our Land and Water tested a variety of flexible ways of doing research, including Fast Fail, Plan B, and the Rural Professional Fund. The ability to experiment, pivot and redirect proved that these are useful ways of supporting science for impact. Funding end-users directly also allows for more bi-partisan funding models.

Being quick is a necessity. We are no longer blessed with time to solve the problems that are facing us. We should aim to find ways to change that involve less red tape and make the process easier. That way, collaborations can be faster and focus on the research.

“We need to work in a ‘build-the-car while we’re driving it’ way.” – Workshop participant

Focus on impact and outcomes

Participants in this workshop wanted research with answers and solutions – not just think pieces – and advocated for continuing to work in an impact-focused way. Science funding should always reward the implementation of research findings, not just peer-reviewed papers. Researchers should be able to demonstrate real-world change as a result of their mahi.

“An indicator for performance should be that farmers use it – tying action and outcome to the funding.” – Workshop participant

Our Land and Water has left an indelible legacy. We don’t unlearn stuff. The levers are there for change.

Acknowledgements

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