

Te Waiora Joint Institute for Freshwater Management

Chris Tanner
Director



Te Waiora
Joint Institute for
Freshwater Management

Te Waiora vision

To undertake research across a wide range of disciplines relevant to freshwater management to lift the quality of freshwater decision making and outcomes within New Zealand and internationally



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato



NIWA
Taihoro Nukurangi

Te Waiora
Joint Institute for
Freshwater Management

Te Waiora: Joint Institute for Freshwater Management

Our mission

Better freshwater decision-making and management strategies

- Creating new knowledge
- Contributing to development of solutions
- Increasing international linkages
- Developing strong, mutually beneficial partnerships
 - Iwi
 - Stakeholders
- Linking Mātauranga and Western Science

Nurture the current and next generation of scientists

- Involve students and researchers in real and practical issues
- Develop inter- and trans-disciplinary approaches and associated skills
- Students and researchers are conversant in the interactions between science, human behaviour, economics and policy

Te Waiora Governance

Joint Management Committee overseeing establishment

- Provides oversight and high level management of the Institute.
- Accountable to the CEO of NIWA and the VC of the University



- Prof Bruce Clarkson
- Prof Sarah-Jane Tiakiwai
- Prof Chad Hewitt/
Prof Janis Swan

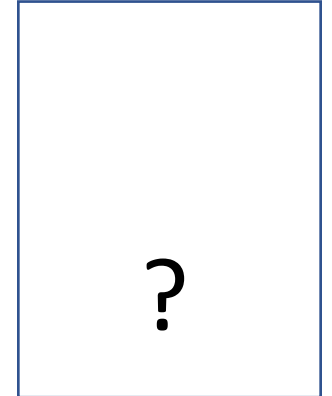


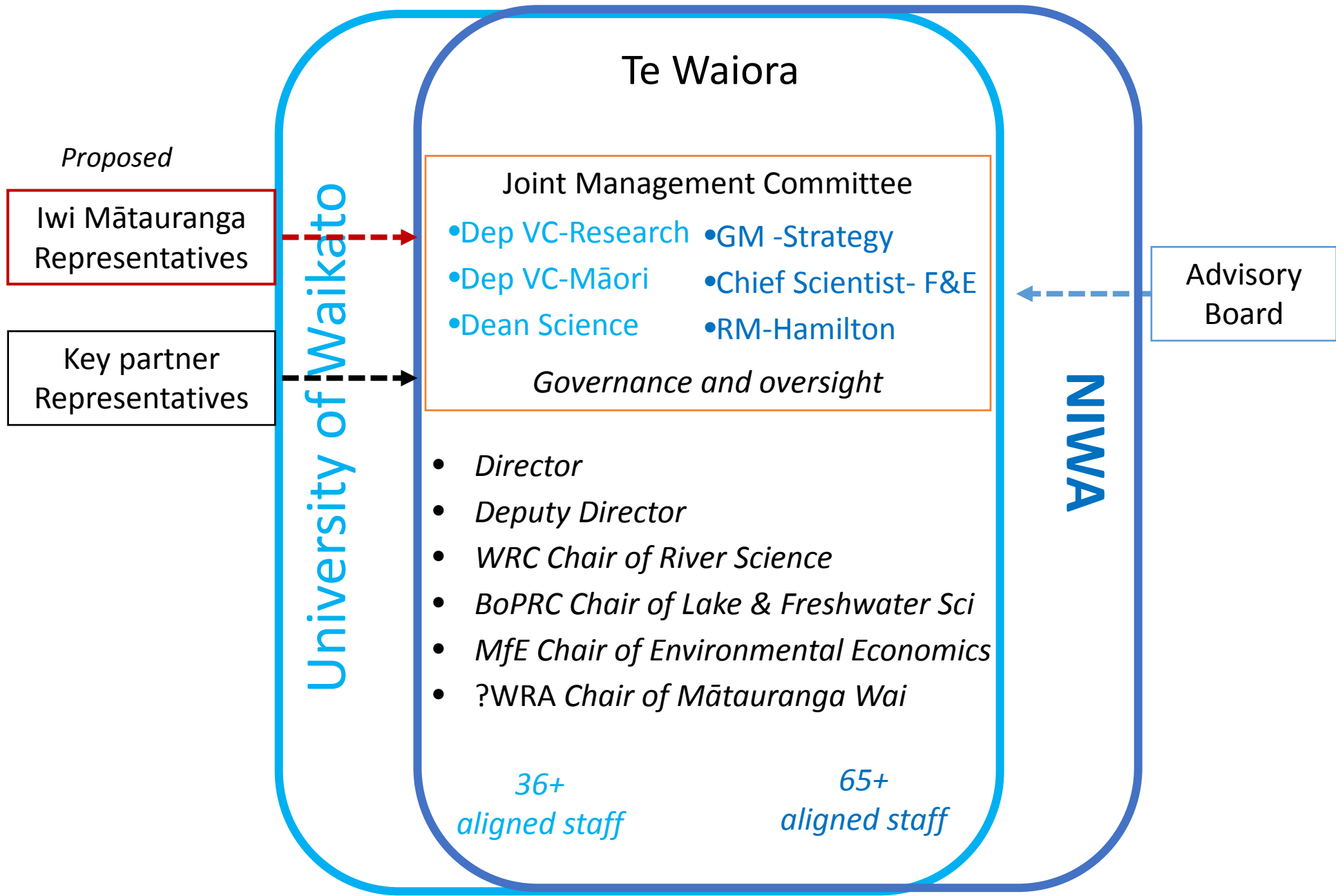
- Dr Bryce Cooper
- Dr John Quinn
- Dr David Roper

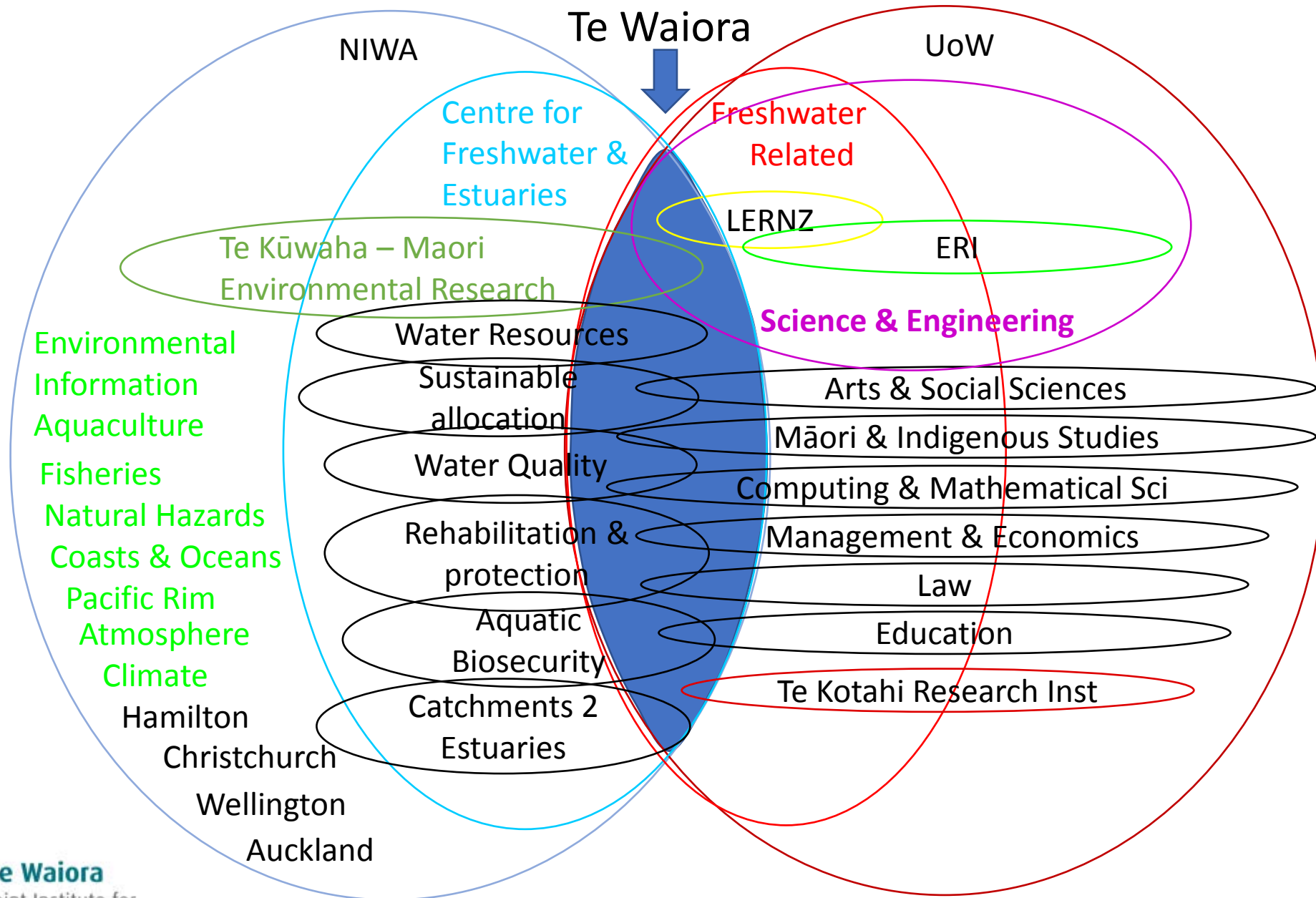


Te Waiora senior leadership

- Director - Dr Chris Tanner
- Deputy Director - Tim Manukau
- Chair of River Science – Prof James Brasington (Waikato Regional Council)
- Chair of Lake & Freshwater Science – Prof Troy Baisden (BoPRC)
- Chair of Environmental Economics- Prof Graeme Doole (MfE)- *recently departed*
- Chair of Mātauranga Wai (WRA?)- *under consideration*







Te Waiora

Joint Institute for
Freshwater Management



Te Waiora research partners

- Research partners we would like to collaborate with:
 - Iwi
 - Waikato Regional Council
 - Bay of Plenty Regional Council
 - other RCs
 - Tainui College of R&D
 - Waikato River Authority
 - DairyNZ
 - Motu
 - Chinese Academy of Sciences (MOU established)
 - Lancaster University Environment Centre (MOU being developed)
 - Other universities (NZ and international)



General and cross-cutting research themes

Restoration, Rehabilitation & Protection of Freshwaters

*Enhancing the future
trajectories of our freshwater
systems*

Society & Freshwater

*Governance, policy and
instruments for improved
management outcomes*

Mātauranga Wai

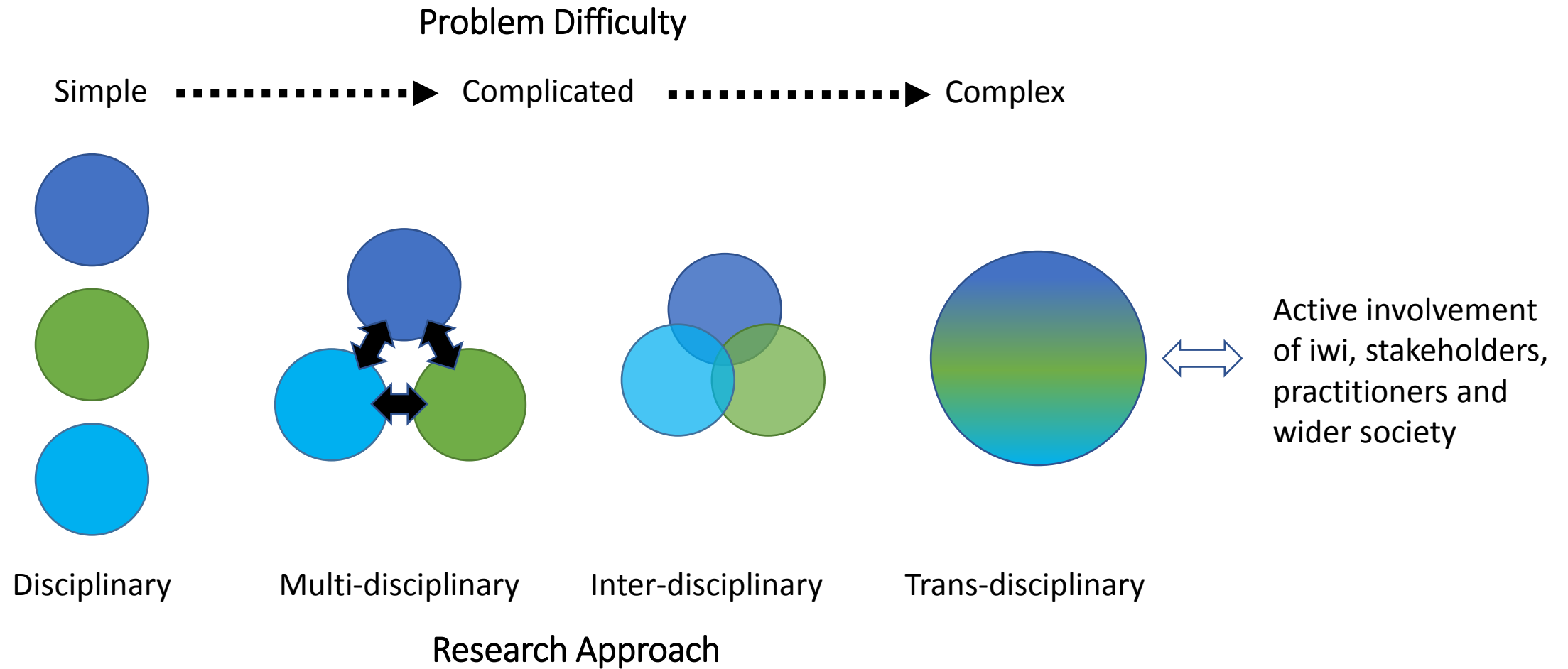
Unlocking innovative,
indigenous knowledge and
building capacity through
stronger partnership

Adaption to Global Change

Harnessing and Responding to New Technologies

Cross-cutting themes

Getting answers to wicked problems



Te Waiora – Waikato River Authority Project 2017-18

- Engage with Iwi to:
 - Develop iwi priorities for the Institute
 - Determine how best to involve Iwi within the Institute
 - Establish a Mātauranga Wai Chair within the Institute

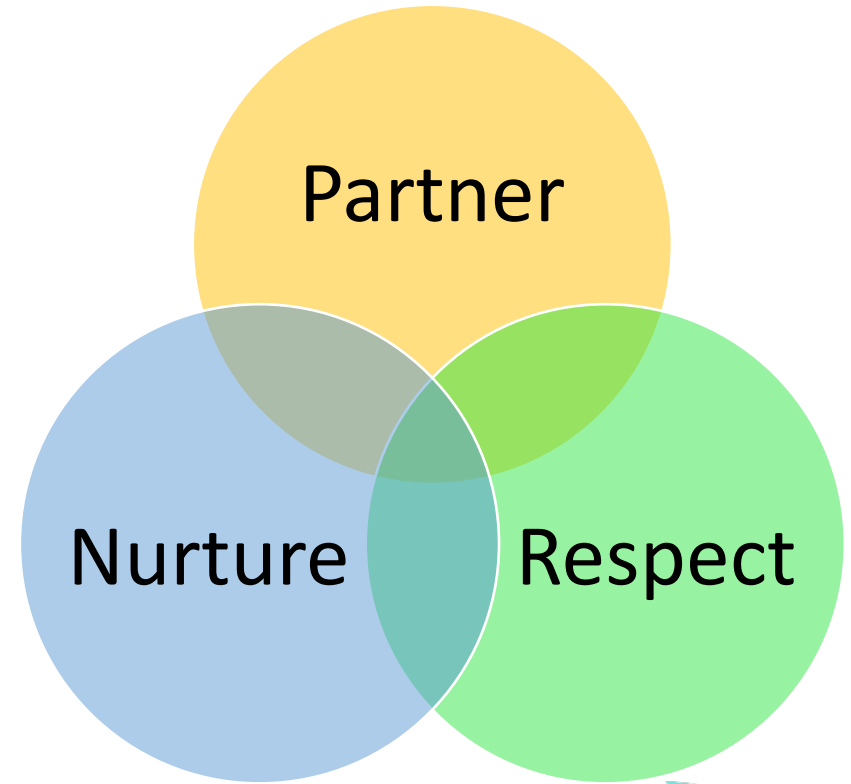
A strong, mutually beneficial partnership, where the freshwater management research outcomes of both the Institute and Iwi are being achieved

- Outcomes
 - Iwi Partnerships Policy
 - Outlines engagement principles
 - Embeds iwi priorities within the Joint Institutes work programme
 - Inviting iwi representation into the Joint Institute's governance
 - Submitted proposal for a new Mātauranga Wai Academic Chair



Iwi engagement principles

- Partner and engage directly with Iwi to:
 - Better understand and apply Mātauranga Māori
 - Address Iwi freshwater research priorities
- Nurture capability development
 - Facilitate internship and scholarship opportunities
 - pathway for Iwi Māori into freshwater management
 - Involve Iwi researchers in the Joint Institute's freshwater research
 - including delivery of the research
- Respect
 - Respect the different knowledge systems and perspectives that we share
 - Ensure open, transparent communication
 - Respect and acknowledge existing relationships that Iwi have with NIWA and the University of Waikato
 - Maintain autonomy to engage individually or collectively in freshwater research



Iwi freshwater research priorities



Taiao

Environmental

- Restoration, protection and maintenance of freshwater
- Achievement of treaty settlements
- Successful completion of iwi freshwater projects
- Achieving objectives in iwi management plans



Tikanga

Cultural

- Development of a Mātauranga Māori tool with iwi
- Healthy and abundant freshwater taonga species
- Protect and recognise iwi freshwater sites of significance
- Provision of iwi freshwater rights and interests
- Protection of waterway customary practices



Hapori

Social

- Advancement of iwi development opportunities
- Build capability in science, education and employment pathways
- Improved access and experience of freshwaters
- Promote the connection between the health and well-being of waterways and people



Whai rawa

Economic

- Enhancement of iwi's economic base and the Maori economy
- Development of freshwater innovation, entrepreneurial capability and investment
- Water allocation and use mechanisms to provide for iwi development interests

Other Te Waiora initiatives

- Joint MBIE Endeavour Proposal successful 2018:
 - *Doubling On-farm Diffuse Pollution Mitigation* (with Lincoln Agritech)
 - Two other proposals came close:
 - *Ecocultural Technologies for Rural Wastewater Treatment* (Quintile 1 science excellence)
 - *Tai Tipu: Restoring Estuarine Ecosystem Services* (Quintile 2 science excellence)
- Joint MBIE Endeavour Smart Idea successful 2018:
 - *Freshwater bioremediation using native mussels - focussed on shallow eutrophic lakes*
- Jointly-funded PhDs
 - *Sediment-effect thresholds for seagrass*
 - *Effects of riparian restoration on koura in Waikato streams*
 - *On-site decentralized wastewater treatment*
 - *Nutrient limits to manage freshwater plants*
- Increasing collaboration on funding applications

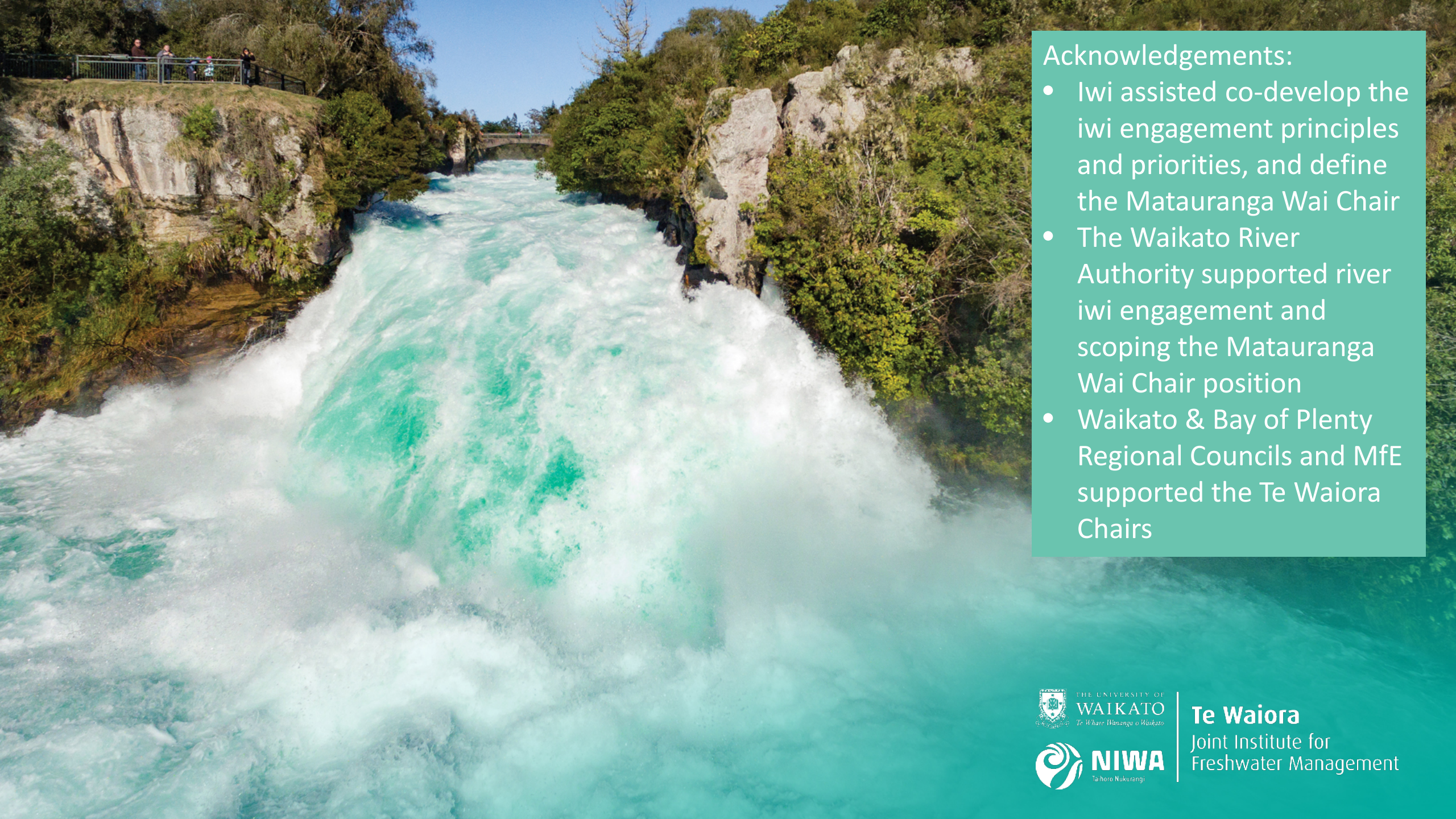
Next Steps: Te Waiora

- Establish iwi representation in the Joint Institute's Governance
- Finalise funding for Mātauranga Wai Chair position and appoint suitable candidate
- Initiate a Te Waiora graduate programme
- Develop joint research proposals leveraging the strengths of our partnerships
- Potential for development of a CoRE
- Engage further with Iwi to:
 - Develop our understanding of Mātauranga and share our science
 - Co-develop collaborative research initiatives
- Develop regional and national partnerships
 - Improve understanding of key management issues and problems
 - Co-develop new research initiatives

Te Waiora: Summary

- Still in its infancy
- Builds on history of collaboration
- Initial focus:
 - Strengthening NIWA/University linkages
 - Engagement with iwi
- Future focus will be on:
 - Growing partnerships
 - Multi-year strategic research projects.
 - Training of post-graduate students
 - Inter- and trans-disciplinary problem-solving
- Come and talk to us if you're interested in being involved





Acknowledgements:

- Iwi assisted co-develop the iwi engagement principles and priorities, and define the Maturanga Wai Chair
- The Waikato River Authority supported river iwi engagement and scoping the Maturanga Wai Chair position
- Waikato & Bay of Plenty Regional Councils and MfE supported the Te Waiora Chairs



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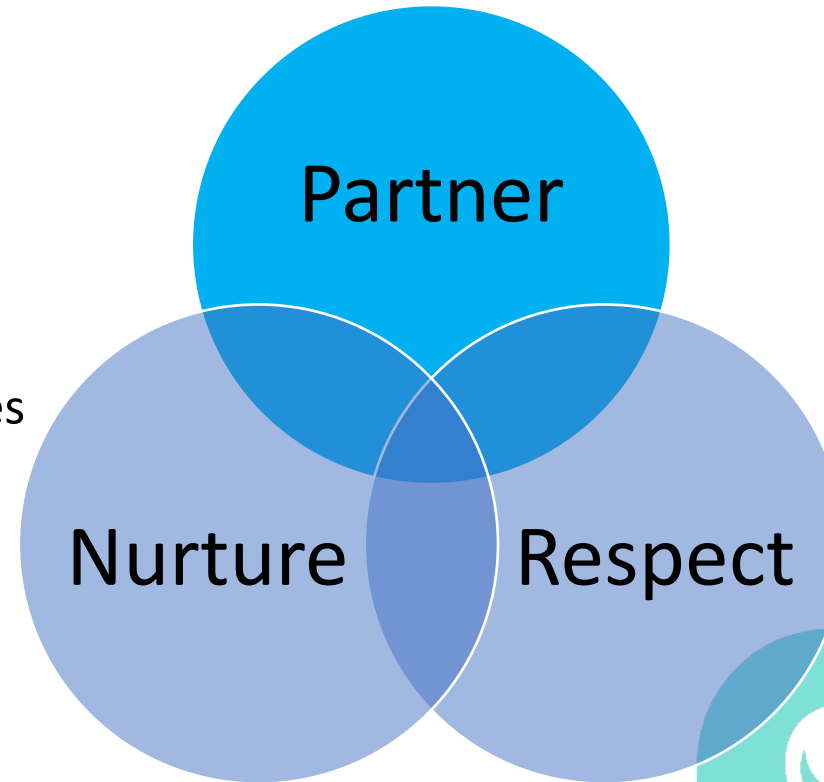


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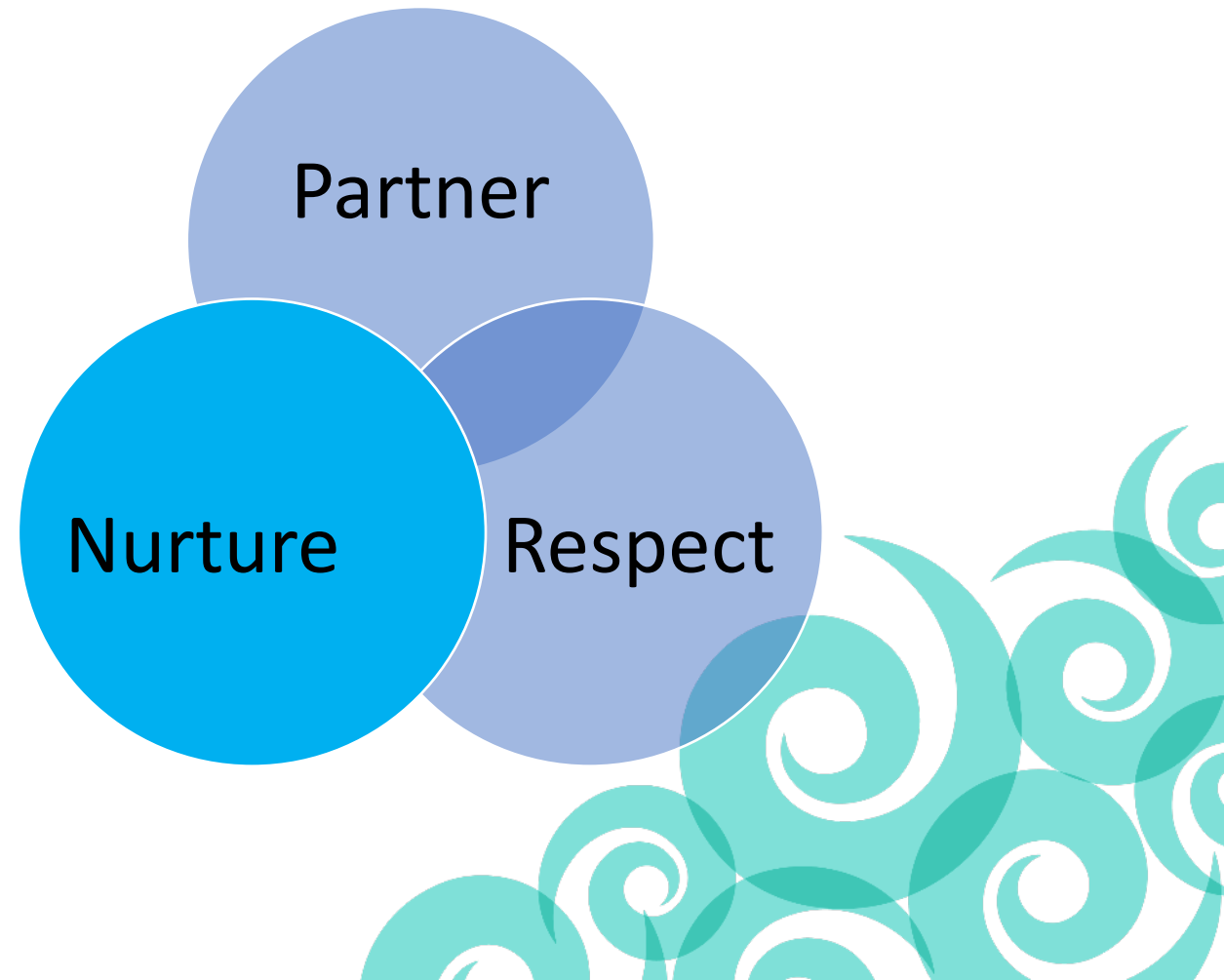
Iwi engagement principles: Partner

- Partner with Iwi to:
 - Better understand and apply Mātauranga Māori
 - Address Iwi freshwater research priorities
- Engage directly with Iwi
 - consider their Iwi management plans when undertaking research within the rohe of an Iwi
- Encourage collaboration, co-design and acknowledgement
- Assist each other to respond to freshwater issues and support information sharing



Iwi engagement principles: Nurture the development of capacity

- Facilitate internship and scholarship opportunities
 - pathway for Iwi Māori into freshwater management
- Involve Iwi researchers in the Joint Institute's freshwater research
 - including delivery of the research
- Share knowledge and build capacity in freshwater management



Iwi engagement principles: Respect

- Respect the different knowledge systems and perspectives that we share
- Ensure open, transparent communication
- Respect and acknowledge existing relationships that Iwi have with NIWA and the University of Waikato
- Maintain autonomy to engage individually or collectively in freshwater research.

