



# NZFSS & AFSS JOINT CONFERENCE 2025

December 1st – December 4th 2025  
Christchurch | Ōtautahi

*Fresh water in flux: challenges and  
opportunities in an uncertain world*



New Zealand Freshwater Sciences Society  
Ngā Kohinga Wai o Aotearoa

## CONFERENCE VENUE: TE PAE CHRISTCHURCH CONVENTION CENTRE

(\* = Student Presentation)

### SUNDAY 30 NOV 2025

4:30pm	Registration desk open
6:30-8:30pm	NZFSS/AFSS 2025 Welcome Function   Te Pae, Exhibition Area

### MONDAY 01 DEC 2025

7:30-8:30am	Early Careers Breakfast ( <i>ticketed event</i> ) Te Pae, Dobson Foyer
8:30-8:40am	Mihi Whakatū - Te Taumata o Ngāi Tūāhuriri Room: Rakaia
8:40-9:00am	Conference opening Room: Rakaia
9:00-9:40am	<b>Keynote 1 - David Hamilton, Griffith University</b> <i>The need for south-to-south collaborations in global assessments of inland waters</i> Room: Rakaia
9:40-10:20am	<b>Keynote 2 - Jane Kitson, Tohu Environmental</b> <i>Whakapapa, Whanaungatanga and Wānanga in Research and Restoration</i> Room: Rakaia
10:30-11:00am	Morning Tea

MONDAY 01 DEC 2025						
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
<b>Theme</b>	<i>Long term and large-scale data management</i>	<i>Trans-Tasman innovations in fish passage &amp; screening: advancing connectivity and conservation 1</i>	<i>Reimagining freshwater monitoring and indicators 1</i>	<i>Catchment management for better water quality</i>	<i>Monitoring the health of freshwater 1</i>	<i>Algae and harmful blooms</i>
<b>Session Chair</b>	<b>Nicolas Ling</b>	<b>Paul Franklin</b>	<b>Rick Stoffels</b>	<b>Brandon Goeller</b>	<b>Kathryn Korbel</b>	<b>Anne Colville</b>
11:00-11:15am	A window to the past: Macroinvertebrate community changes in response to riparian revegetation works and land cover using historical datasets <b>Mariah Sampson</b>	Effectiveness of a lateral ridge rock ramp fishway for restoring fish passage at a gauging weir in Northland <b>Paul Franklin</b>	What might a 'reimagined monitoring programme' look like in the real world? Meeting the information requirements of Whaitua Implementation Plan <b>Rick Stoffels</b>	How should we interpret contaminant runoff concentrations from land-use compared to water quality guidelines? <b>Richard Muirhead</b>	Assessing the Health of Groundwater in New Zealand through Bacterial and Archaeal Biodiversity <b>Judith Webber</b>	High Water Temperatures, Algal Blooms, and Low Oxygen: Understanding the Risk to Juvenile Fish <b>Joel Egan*</b>
11:15-11:30am	The problem with databases: in the age of Big Data are we generating Big Errors? <b>Nicholas Ling</b>	Innovations in Tidal Fishway Design: Advancing Juvenile Diadromous Fish Passage at Coastal Barriers in Australia <b>Tim Marsden</b>	Identifying areas favourable for species of interest using environmental proxies compared to modelling processes <b>Rebecca Lester</b>	Mud, bugs, and Mosquitofish: Testing BMPs in Lowland Dairy Drains <b>Alastair Suren</b>	Assessing the Health of Groundwater in New Zealand Through Biodiversity <b>Panan Sitthirit</b>	Predicting phytoplankton community response to environmental change in a shallow coastal lagoon <b>Daniel Chilton</b>
11:30-11:45am	Using GIS automation to process, summarise and interpret high volumes of complex environmental data <b>Chris Wilson</b>	Baffling solutions: effectiveness of baffles and floating fish ramps at facilitating fish passage through culvert barriers on the West Coast <b>Nixie Boddy</b>	A framework for assessing recovery constraints in restoration: freshwater macroinvertebrates as an illustrative example <b>Belinda Margetts</b>	Nature's Palette: Discovering the Water Colour Dynamics in Temperate Forested Catchments in South-eastern Australia <b>Charuni Jayasekara</b>	From Catch to Concern: The Presence of PFAS (Per and Polyfluoroalkyl Substances) in Aotearoa's Freshwater Fish <b>Carys Marulli de Barletta*</b>	Revisions to the recreational cyanobacteria guidelines for Aotearoa New Zealand <b>Jonathan Puddick</b>

Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
11:45-12:00pm	Working better together with eDNA <b>Carolyn Mander</b>	Key learnings from attempted remediation of fish passage barriers on the West Coast <b>Sjaan Bowie</b>	Freshwater Policy Effectiveness Monitoring: How do we measure the success of our freshwater plans? <b>Olivier Ausseil</b>	Performance of constructed wetlands to reduce diffuse pollution across New Zealand's diverse and changing farmed landscapes <b>Brandon Goeller</b>	Collaborative Monitoring for Freshwater Outcomes in the Waikanae River Catchment <b>Stephanie Davis</b>	The growth effects of saxitoxin- and non-saxitoxin-producing lysates of cyanobacteria on alfalfa seedlings <b>Anne Colville</b>
12:00-12:15pm	How reliable is your trend? Evaluating the deviation of estimated slopes from true trends in lake water quality time series <b>Deniz Ozkundaki</b>	Fish passage for the future: Innovating to restore fish migration routes for sustainable freshwater food systems – <b>Nicki Duncan*</b>	Effects of climate variability on water quality trends <b>Shirley Hayward &amp; Caroline Fraser</b>	Working together to manage Lake Whatihua for the next generation <b>Maddison Jones</b>	Insights from long-term State of Environment monitoring in Dune lakes in Northland <b>Suha Sanwar</b>	Declining glacier cover re-shapes global river algae communities <b>Nicky Kerr</b>
12:15-12:30pm	From Biogeography to Action: Toward Landscape Management of Non-Migratory Galaxias Fish Species <b>Hossein Valikhani</b>	Fish passage at pumpstations: Infrastructure solutions <b>Alicia Williams</b>	Developing measures of river function for use in long-term waterway monitoring and assessment programs <b>Ryan Burrows</b>	Investigating filamentous algae attachment by rhizoidal differentiation to promote algae establishment on filamentous algae nutrient scrubbers <b>Mashanta Mohsin</b>	Lake biodiversity estimates vary with environmental DNA collection method and sampling location <b>Georgia Thomson-Laing</b>	Cyanobacteria, BMAA and Motor Neurone Disease: Are there risks for Freshwater Scientists <b>Anne Colville</b>
12:30-1:30pm	Lunch / <i>Kindly sponsored by EOS Ecology</i>					
1:30-2:00pm	<b>Keynote 3 - Will Higgsison, University of Canberra</b> <b>- Christy Fellows Lecture -</b> <i>Planning and Evaluating Environmental Watering for Vegetation Outcomes</i>					

MONDAY 01 DEC 2025						
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
<b>Theme</b>	<i>Threatened species conservation 1</i>	<i>Trans-Tasman innovations in fish passage &amp; screening: advancing connectivity and conservation 2</i>	<i>Reimagining freshwater monitoring and indicators 2</i>	<i>Food webs and environment restoration 1</i>	<i>Monitoring the health of freshwater 2</i>	<i>What do decision makers need to hear from expert witnesses? Guidance for early career experts.</i>
<b>Session Chair</b>	<b>Martha Jolly</b>	<b>Paul Franklin</b>	<b>Rick Stoffels</b>	<b>Michelle Hobbs</b>	<b>Georgia Thomson-Laing</b>	<b>Richard Allibone &amp; Mike Freeman</b>
2:00-2:15pm	Conservation status of New Zealand freshwater fishes – assessments, approaches, and applications <b>Nicholas Dunn</b>	Rock Ramp Fishways: Evolving Designs for Diverse River Systems in Australia and New Zealand <b>Tim Marsden</b>	A call for dynamic and adaptive monitoring – <b>Angus Webb</b>	The effect of coastal lake macrophyte collapse on the cross-ecosystem prey resource landscape for long fin eels <b>Simon Stewart</b>	The Darling Baaka River Health Program: An in-depth study of river health and recovery <b>Kathryn Korbelt</b>	
2:15-2:30pm	Digital Innovation for Inanga Conservation: From Regional Pilot to National Implementation through ESRI-Based Tools and Predictive Modelling <b>Nic Naysmith</b>	Evaluating Low-Cost Methods for Fish Passage Remediation in Small Streams <b>Trevor James</b>	Are trends in species occupancy or an index of biotic integrity more useful for guiding fish conservation planning? <b>Richard White</b>	Trophic interactions of non-native and native piscivores in shallow, lowland lakes in the Wellington region, New Zealand <b>Alton Perrie*</b>	Revealing ecosystem stress in the lower Darling Baaka through macroinvertebrate monitoring <b>Grant Hose</b>	
2:30-2:45pm	Does trout suppression enhance population performance of river-resident galaxiids? <b>Naomi Heller*</b>	Decoding migration in a changing climate: insights from 35 years of fishway monitoring <b>Ivor Stuart</b>	Detecting the undetected: evaluating snorkelling as a monitoring tool for freshwater mussels in non-wadable reaches <b>Ben Crichton</b>	Aquatic-terrestrial linkages and biodiversity spillover in forest streams <b>Frank Burdon</b>	Mind that step: Understanding the changes that come with adopting National Environmental Monitoring Standards for macroinvertebrate monitoring <b>Chris Meijer</b>	

MONDAY 01 DEC 2025						
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
2:45-3:00pm	Graph theory: an attractive approach to improve threatened species management at the catchment scale <b>Rupert Mathwin</b>	Breaking Barriers: Long-Term Effects of Connectivity Restoration on Urban Fish Populations <b>James Shelley</b>	Developing low-cost technology for automated monitoring of greenhouse gases and biodiversity in freshwater systems <b>Martino Malerba</b>	Restoration of floodplain wetlands: Indicators, restoration techniques and sampling methods <b>Sally Maxwell</b>	Optimising eDNA detection of kōura: effects of biomass, diurnal activity and DNA decay <b>Konstanze Steiner</b>	
3:00-3:15pm	Protecting Kākahi: Pest Fish Exclusion Enclosures in Lake Rototoa <b>Belinda Studholme</b>	Pumping Past Barriers: A Preliminary Look at Australia’s First Fishheart™ Fishway Trial <b>Craig Boys</b>	Wai-spy: A New Lens on Awa Safety <b>David Wood</b>	Flood magnitude affects fatty acid food web quality in a free-flowing tropical river-floodplain <b>Colton Perna*</b>	Restoring urban billabongs in partnership with Wurundjeri Woi-wurrung Traditional Owners <b>Joe Greet &amp; Narrup Rangers</b>	
3:15-3:45pm	Afternoon Tea / <i>Kindly sponsored by Earth Sciences New Zealand</i>					
Room	Plenary-Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
<b>THEME</b>	<i>Population and community ecology 1</i>	<i>Trans-Tasman innovations in fish passage &amp; screening: advancing connectivity and conservation 3</i>	<i>Reimagining freshwater monitoring and indicators 3</i>  <i>+ (from 5:00pm) Urban freshwater systems 1</i>	<i>Food webs and environment restoration 2</i>	<i>Monitoring the health of freshwater 3</i>  <i>+ (from 4.45pm) Environmental flows 1</i>	<i>Science and cultural-based solutions for lake stewardship in an uncertain future</i>
<b>Session Chair</b>	<b>Frank Burdon</b>	<b>Paul Franklin</b>	<b>Ryan Burrows</b>	<b>Simon Stewart</b>	<b>Tina Bayer</b>	<b>Deniz Ozkundakci</b>
3:45-4:00pm	Are dispersing caddisflies phenotypically different from conspecific residents? - <b>Jill Lancaster</b>	Group swimming significantly decreases time to passage success for a galaxiid species <b>Rachel Crawford*</b>	The next frontier in biological monitoring: measuring against the counterfactual <b>Ross Thompson</b>	Potential impacts of low flows on fish foodscapes and production in rivers <b>Rick Stoffels</b>	The strength and reliability of science-informed Community Based Monitoring (CBM) <b>Courtney Bosse</b>	Lake ecosystem responses to extreme storm events: Insight from Cyclone Bola <b>Marcus Vandergoes</b>

MONDAY 01 DEC 2025						
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
4:00-4:15pm	Biodiversity responses in temporary waters due to a rapidly drying climate <b>Zac Kayll*</b>	Downstream fish passage at small-scale hydropower plants <b>Josef Knott</b>	Understanding the Water sustainability from key informant perspectives: insights from the Sydney basin <b>Niruban Chakkaravarthy Dhanasekaran*</b>	What nutrients are responsible for the higher microbial-driven organic matter decomposition in Melbourne streams affected by human land use? <b>Elaine Yuen*</b>	To what extent can we use seasonal data to monitor lakes? <b>Tina Bayer</b>	
4:15-4:30pm	Characterising the Contribution of Small Streams to Fish Biodiversity in New Zealand: A $\beta$ -Diversity Approach Using eDNA <b>Lovisa Ekelund*</b>	The Fishheart Fishway: from Lapland to the Land Down Under <b>Mika Sohlberg</b>	Understanding what the right mix is for freshwater monitoring objectives in Aotearoa New Zealand <b>Evan Harrison</b>	Growing with the flow: Flood pulses generate resource and decapod booms in a regulated river-floodplain system <b>Alana Cormican*</b>	Evaluating eDNA for National Macroinvertebrate Metrics in New Zealand Streams <b>Elizabeth Graham</b>	Are we underestimating biodiversity decline? Community homogenisation among lakes hides local biodiversity loss <b>Rose Gregersen</b>
4:30-4:45pm	Startling diversity in a Papua New Guinea River <b>Holly Emery-Butcher</b>	Use of an Improved Fishway Performance Metric to Optimise Fishway Operation <b>Thomas Ewing</b>	Using phytoplankton to understand ecosystem health in the Darling Baaka River after large fish death events <b>Simon Mitrovic</b>	Defining the fundamental and realized niche of kōaro ( <i>Galaxias brevipinnis</i> ) in isolated, trout-free lakes <b>Lauren Hitt*</b>	What happens in deep lakes? Modelling and observations from Lake Wānaka <b>David Plew</b>	Improving Freshwater Quality through Catchment-Scale Collaboration and On-Farm Action – The Lake Wanaka Wai Ora Project <b>Chris Arbuckle</b>
4:45-5:00pm	Temporal variability of instream vegetation communities <b>Scott McKendrick</b>	Development of a Fish Capture Facility for Testing Fish Health and Condition after Interaction with a Fish Exclusion Screen <b>Tony McCormick</b>	Quantification of phosphorus and dissolved organic carbon loads from street trees to urban stormwater pollution in the Lake Tuggeranong catchment <b>Rodney Ubrihien</b>	Experimental saltwater intrusion in tropical freshwater wetlands causes food web simplification and fatty acid food quality trophic cascade <b>Tegan Dedman*</b>	A decade of evaluating ecological outcomes from environmental watering in the Murray–Darling Basin: the challenge of telling a cohesive story <b>Jackie O'Sullivan</b>	Indigenous Ecological Economics - creating space for holistic, customary approaches to Freshwater Valuation <b>Mereana Wilson-Rooy*</b>

Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
5:00-5:15pm	Positive effects of a range-shifting caddisfly on high-elevation food webs <b>Amanda Klemmer</b>	A Field-Based Method for Modelling Pump-Induced Hydraulics: Fish Threats and Screen Mitigation Potential <b>Patrick McSweeney*</b>	Nutrient contributions from urban street sweeping material inside concrete stormwater pits <b>Megan Fluke*</b>		Flow regime and water temperature influence recruitment success of blackfish in south-eastern Australia <b>Frank Amtstaetter</b>	People and power in lake stewardship: a review of the human dimensions of lake restoration <b>Kiely Mcfarlane</b>
5:15-5:30pm	Exploring metapopulation dynamics of amphidromous species <b>Charlie Hinchliffe</b>	Invisible barriers: closing knowledge gaps on infiltration galleries for screening native fish <b>Mike Hickford</b>	Potential effects of elevated salinity levels on freshwater stream ecosystems in the Northern South Island of New Zealand <b>Mark Hamer</b>		Getting along at Jemalong - An interagency watering trial <b>Alica Tschierschke</b>	Reconstructing the Past Environment of the Lower-Birrarung Billabongs <b>Patrick Kennedy* &amp; Narrup Rangers*</b>
5:30-8:00pm	<b>SWIM Focus Group Meetings</b> Rooms: Dobson 1 & 2					
5:45-6:30pm	<b>Lungfish Lecture – Jenny Davis, Charles Darwin University</b> <i>Watching waterholes: tracking the hydrological and ecological processes supporting freshwater refugia in a warming world</i> Room: Rakaia					

TUESDAY 02 DEC 2025						
7:30-8:30am	NZFSS/AFSS Executive Committee breakfast <i>Venue: Child Sister Café, Manchester St</i>					
8:50-9:00am	Welcome – Day 2					
9:00-9:40am	<b>Keynote 4 - Adrian Meredith, Environment Canterbury</b> <i>A local government resource management career wisely spent?</i> Room: Rakaia					
9:40-10:20am	<b>Keynote 5 - Paul Humphries, Charles Sturt University</b> <b>- Hilary Jolly Memorial Lecture -</b> <i>Looking backwards. Looking forwards   Hillary Jolly Medal talk</i> Room: Rakaia					
10:30-11:00am	Morning Tea / Kindly sponsored by Environment Canterbury					
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
<b>THEME</b>	<i>Enhancing freshwater ecosystem's resilience to change + (from 11:45) Future-proofing freshwater ecosystems: from science to action to restore and build resilience 1</i>	<i>Trans-Tasman innovations in fish passage &amp; screening: advancing connectivity and conservation 4</i>	<i>Urban freshwater systems 2</i>	<i>Environmental flows 2</i>	<i>Threatened species conservation 2</i>	<i>Workshop: Communicating your freshwater science with impact</i>
<b>Session Chair</b>	<b>Angus McIntosh</b>	<b>Gerry Closs</b>	<b>Jenny Webster-Brown</b>	<b>Jason Nicol</b>	<b>Channel Thoms</b>	<b>Katharina Doehring</b>
11:00-11:15am	Room for the river: exploring potential ecological effects from historic narrowing and exotic vegetation in three New Zealand braided rivers <b>Michelle Greenwood</b>	Developing pipe fishways to reconnect Australian fish passage <b>Jasmin Martino</b>	Assessing thermal regimes in Auckland streams under urban pressure <b>Nadia Dikareva</b>	Unveiling the truth: Large Scale Insights into Riparian Vegetation Responses to Environmental Flows <b>Chris Jones</b>	Making room for everyone: The critical plight of Aotearoa   New Zealand's forgotten fish <b>Martha Jolly*</b>	



TUESDAY 02 DEC 2025						
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
11:15-11:30am	Mākara Whitua: Retrofitting Agricultural Land for Freshwater Restoration <b>Tyler Florance*</b>	Hard knocks and pressure drops: combined laboratory and field observations reveal hidden risks to fish migrating past water control structures <b>Craig Boys</b>	Nutrient dynamics in an urban lake <b>Manuja Lekammudiyanse</b>	Role of environmental water in the maintenance of aquatic vegetation in Lakes Alexandrina and Albert, Murray Darling Basin, Australia <b>Jason Nicol</b>	Northland Inanga Spawning Habitat Restoration Project (NISHRP) - Final Results <b>Tracey Phillip</b>	
11:30-11:45am	Fish monitoring for the NPS-FM: experiences in establishing a new monitoring programme <b>Graham Surrey</b>	Comparing ecological effects of innovative and conventional hydropower in Europe <b>Juergen Geist</b>	A leafy solution? The effectiveness of tī kōuka (Cordyline australis) as habitat additions for macroinvertebrate communities in an urban stream <b>Hannah Whittall*</b>	Water quality outcomes of an environmental flow delivery to a Ramsar site in the Southern Murray- Darling Basin, Australia <b>Xiaoying Liu</b>	On the Precipice of Extinction: Genetic Data in the Conservation Management of In Situ and Ex Situ Collections of the Critically Endangered Muehlenbeckia Tuggeranong <b>Isobel Walcott</b>	
11:45-12:00pm	Slow, fast and stable: Productivity variation underpins riverscape resilience <b>Angus McIntosh</b>	Rock Ramp Fishways in New Zealand: Evidence-Based Solutions for Enhancing Fish Passage <b>Cindy Baker</b>	The hidden housing crisis: investigating the significance of habitat quality in urban stream systems <b>Lily Ashenden*</b>	Nitrate Transport Dynamics Between Groundwater and Surface Water in the Pukekohe Area, South Auckland <b>Laura Buckthought</b>	Shortjaw kōkopu in the Waikato: two case studies <b>Josh Smith</b>	
12:00-12:15pm	More than mud: The drivers of Chatham Island mudfish distribution <b>Grace Fortune-Kelly*</b>		Scaling Visual AI for Discharge Detection & Stormwater Compliance in Auckland: From Complexity to Operational Reality <b>James Dare &amp; Bianca Lilley</b>	Linking groundwater nutrients from septic tanks to littoral ecosystems in Lake Tarawera <b>Sarah Tetzlaff*</b>	What's for dinner? Dietary differences of glass eels (Anguilla spp.) in New Zealand <b>Siobhan Nuri*</b>	

Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
12:15-12:30pm	Are We Ignoring Biology? A Global Review of Biotic Interactions in Freshwater Restoration Outcomes <b>Lydia Gilbert*</b>		Automated Detection and Ecological Risk Assessment of Wastewater Discharges Using Multivariate Continuous Water Quality Data <b>Ebrahim Hussian</b>			
12:30-2:00pm	Lunch NZFSS AGM (Dobson 1) AFSS AGM (Dobson 2)					
Room	Plenary-Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
<b>Theme</b>	<i>Ecological forecasting in freshwaters</i>	<i>Modelling to inform decision-making 1</i>	<i>Threatened species conservation 3 + (from 2:45pm) Policy and Practice 1</i>	<i>Collaborative research for freshwater fish 1</i>	<i>Future-proofing freshwater ecosystems: from science to action to restore and build resilience 2</i>	<i>Workshop: Unmasking human health Quantitative Risk Assessment (QRA) for freshwater recreation</i>
<b>Session Chair</b>	Whitney Woelmer	Leon Barmuta	Richard Allibone	Joanne Clapcott	Naomi Wells	Beverley Horn
2:00-2:15pm	An ecological forecast algal biomass in an important re creational lake <b>Jonathan Tonkin</b>	Concrete, canopy and climate: how will urban stream invertebrates respond to future environments? <b>Thomas Wilkins*</b>	The population health of the Manuherekia alpine galaxiid and surveys for further galaxiid populations in the upper Manuherekia catchment <b>Richard Allibone</b>	From masks to wishing trees: Creative methods for reimagining relationships with freshwater environments <b>Katharina Doebling</b>	Designing a multi- species habitat restoration for an isolated segment of the Motueka river delta <b>Monique Patterson</b>	
2:15-2:30pm	Integration of multisource data on algal blooms informs the development of ecological forecasts - <b>Whitney Woelmer</b>	The heavy implications of model uncertainty: How wrong can our catchment flow and load estimates be? <b>Patrick Durney</b>	Tracking Canadian Juvenile Chinook Salmon with Acoustic Telemetry <b>Selena Carl*</b>	“What would a tuna say?” Affective approaches for engaging with freshwater futures <b>Joanne Clapcott</b>	Flagship turtle species highlights impacts of multiple stressors of urbanisation and climate change on wetlands <b>Jane Chambers</b>	

Room	Plenary-Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
2:30-2:45pm	Modelling lake ecosystem responses to extreme weather events <b>Matthew Prentice</b>	Predicting algal debris risk at power plant intakes in Lake Ontario <b>Anika Kuczynski</b>	Trialling traditional Maori whakaweku traps for Tasmanian invertebrates in freshwater streams <b>Caitlin Silberberg*</b>	Canal fishing: instrumentalising nature or stepping stone to environment stewardship? <b>Aisling Rayne</b>	Kaitiakitanga o te kanakana: Captive breeding opportunities for kanakana (pouched lamprey; <i>Geotria australis</i> ) <b>Luka Finn</b>	
2:45-3:00pm	Evaluating freshwater fish vulnerability and adaptive capacity to climate change in NZ <b>Andrew Watson</b>	Structural model sensitivity alters predictions and affects management decision-making ability <b>Galen Holt</b>	Offsetting: Challenges and opportunities <b>Mark Lowe</b>	Reclaiming hidden knowledge and freshwater futures in Murihiku <b>Kasmira Peterson</b>		
3:00-3:15pm	As simple as possible? A three-zone predictive framework for wetland plant communities with quantifiable hydrological thresholds <b>Dave Deane</b>	Circulation Patterns and Ecological Response in a Large Lake: High-Resolution Modelling Evidence from Lake Taupō <b>Aidin Jabbari</b>	Can carbon credits pay for more sustainable farm ponds? A cost-benefit analysis <b>Karunapala Uyanwattage Dona Nipunika Hansani*</b>			
3:15-3:45pm	Afternoon tea					
3:45-5:30pm	Poster Session – <b>kindly sponsored by Envco Global</b> <i>See presenter list on next page</i>					
5:30-6:30pm	Early Career/Mentor Networking Event ( <i>ticketed event</i> ) Room: Rakaia					
6:30-7:45pm	<a href="#">Free Public Lecture Event</a> - <i>Our Freshwater Taonga - Shining the spotlight on some threatened beasties of Aotearoa</i> Room: Rakaia					

POSTER PRESENTATIONS			*= Student Presentation
Poster #	First Name	Last Name	Poster Title
1	Bryony	Alden*	Pondering microplastics: assessing microplastic contamination of freshwater ponds in Aotearoa New Zealand
2	Janet	Anstee	DION: A High-Fidelity Darkwater Inland Observatory Network Supporting Satellite Remote Sensing and Water Quality Modelling in Australia
3	Mariana	Basilio	Integrated Catchment Management in Bream Bay: A Collaborative Action Plan for Water Quality and Biodiversity Enhancement
4	Nina	Batucan	Effects of two common contaminants, ibuprofen and imidacloprid, on invertebrate and periphyton communities: A field mesocosm study
5	Victoria	Cantalapiedra*	Investigating the effects of freshwater acidification on individual and community level responses in microalgae in Te Awa o Waikato
6	Zachary	Clark*	Relationships between periphyton, land-use and environmental variables in Aotearoa, New Zealand: Patterns, drivers and implications
7	Katie	Collins	Alum dosing Lake Moawhitu, Rangitoto ki te Tonga (D'Urville Island)
8	Ciaran	Cullen*	Germination requirements and hydrochory of semi-arid floodplain-wetland forbs
9	Caitlin	Daley*	The Tiaki Maniototo Project, a Jobs for Nature initiative in the Upper Taieri Catchment
10	Christopher	Davenport*	Returning Home by the Sea: A Study into the recruitment of Galaxius Maculatus
11	Ciara	Espiner*	Swim like nobody's watching: Using remote underwater videography to observe fish behaviour in wooded stream pools
12	Nina	Fisch	The problem with PFAS
13	Georgia	Goodsell*	Investigating soil health markers as indicators for wetland restoration success.
14	Megan	Hamersky*	Assessing the influence of extreme weather on lake functions using high-frequency buoy monitoring
15	James	Hitchcock	Cold-water pollution: how hypolimnion releases from large dams alter thermal regimes and downstream ecosystems
16	Lauren	Hitt*	What's in a name? The need to develop grouping terms that reflect the different life history strategies of Aotearoa galaxiids
17	Ben	Humphreys	Groundwater -surface water connectivity and river health in the Lower Darling Baaka River
18	Jasmine	Lane*	From Wetlands to What's Left: Giant Kōkopu (Galaxias argenteus) in a Fragmented Freshwater Landscape
19	Simone	Langhans	Smart catchment planning for a changing freshwater future
20	Kathryn	Korbel	Death by a thousand (head)cuts? Alluvial gullies and geomorphic condition of the lower Darling Baaka
21	Kate	Mathers	From stream to bench: assessing efficiency of desiccating filter kits for eDNA preservation
22	Nicole	McCasker	Validating age estimation from shell ring deposition in the river mussel Alathyria jacksoni (Unionoida: Hyriidae)
23	Kiely	McFarlane	Legacy issues in freshwater fish management in Aotearoa
24	Chris	Meijer	Reporting the full story: Developing a framework to include habitat in state of the environment reporting
25	Andrew	Rossaak	An innovative and practical method to minimise harm to fish in a complex streamworks project
26	Tasman	Sadler*	Investigating The Impacts of Trout on Macroinvertebrates in the Australian Alps
27	Wonder	Sekey	Cross-realm Spatial Conservation Planning for Diadromous Species
28			

	Kerry	South	Swimming Upstream: Data-Driven Insights into Fish Passage
29	Ksenia	Trifonova*	Hydrodynamic and Thermal Controls on Sediment-Water Exchange of Nutrients and Trace Elements in Freshwater Reservoirs
30	Luc	Visser*	Using eDNA to evaluate ecological rehabilitation measures for threatened rheophilic fish: insights from a heavily modified river in North-Western Europe
31	Robyn	Watts	Scientists and First Nations people working in partnership to undertake monitoring and research on environmental flows in the Mid-Murray River
32	Mel	Whiting*	Assessing the impacts of land use change and introduced perch on biodiversity and food webs in Lake Denny, Ōtūwharekai
33	Matthew	Wylie	Fish germ cell cryobanking and transplanting for conservation in Aotearoa-New Zealand?
34	Ana	Zupancic*	Cutting out the host to determine freshwater food webs: Using CRISPR-Cas9 to improve prey detection in diet metabarcoding analysis.
35	Megan	Fluke*	Nutrient contributions from urban street sweeping material inside concrete stormwater pits

WEDNESDAY 03 DEC 2025						
8:50-9:00am	Welcome – Day 3					
9:00-9:40am	<b>Keynote 6 - Erin Hotchkiss, Virginia Tech</b> <i>Taking the pulse of inland waters: Opportunities and challenges associated with using dissolved oxygen to monitor the health of freshwater ecosystems</i> Room: Rakaia					
9:40-10:20am	<b>Keynote 7 - Phil Duncan, University of Canberra</b> <b>- Biame Lecture -</b> <i>Principles &amp; Practice, Indigenous Engagement in Water Management, The Gamilaroi Experience</i> Room: Rakaia					
10:30-11:00am	Morning tea					
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
<b>Theme</b>	<i>Honouring freshwater as a taonga – Māori-led initiatives in freshwater management and restoration</i>	<i>Invasive species - detection, surveillance and management 1</i>	<i>Collaborative research for freshwater fish 2</i>  + (from 12:15pm) <i>Wetland protection and preservation 1</i>	<i>Sam Lake session 1</i>	<i>Emerging techniques in freshwater science</i>	<i>Open Panel Discussion: Challenges, barriers and solutions to improving freshwaters</i>
<b>Session Chair</b>	<b>Carly O'Connor &amp; Jane Kitson</b>	<b>Elizabeth Graham</b>	<b>Joanne Clapcott</b>	<b>Michael Douglas</b>	<b>Martino Malerba</b>	<b>Jon Harding</b>
11:00-11:15am	Moawhitu: Cultural and scientific collaboration to restore a lake and wetland <b>Neil Deans</b>	Chasing thin signals: Optimising eDNA tools for rare and allochthonous targets in lotic systems <b>Anastasija Zaiko</b>	Revitalising mātauraka and governing taonga fisheries <b>Sally Reihana</b>	Emeritus Professor Sam Lake (1941-2025): eminent freshwater ecologist, extraordinary colleague, generous mentor, great friend.....and keen fisherman <b>Barbara Downes</b>	Do insights from emerging technologies correspond with known wetland condition? <b>Catherine Leigh</b>	
11:15-11:30am	Mussels as kin, food and river health indicator – <b>Michelle Hobbs*</b>	Corbicula fluminea (Clam) impacts on natural planktonic communities in lakes Kārapiro and Maraetai <b>Karl Safi</b>	Understanding NZer's connection with freshwater fish <b>Marc Tadaki</b>	Snapshots from the 1970's: Recollections of Sam Lake's early academic career and influence <b>Jenny Davis</b>	eDNA monitoring of waterbirds for the Darling Baaka River Health Project <b>Grant Hose</b>	

Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
11:30-11:45am	Tino rangatiratanga in highly modified systems: A comparative case study on Waitarakao and Waituna lagoons <b>Lucy Coulston*</b>	Does lake snow production enhance nutrient acquisition in Lindavia intermedia <b>Phil Novis</b>	Unpicking feedback loops within the social-ecological fabric of freshwater fisheries management <b>Robin Holmes</b>	Sam Lake – Outlier <b>Ben Gawne</b>	Environmental DNA as a tool for rapid zooplankton assessment in lakes in Aotearoa New Zealand <b>Joëlle Lousberg*</b>	
11:45-12:00pm	Whakaora i te mauri o Wairarapa moana: Pathways towards Maori-led restoration of macrophyte communities <b>Katie Brasell</b>	Ecological and genetic assessment of non-native rainbow trout populating a high-altitude lake of Chile's altiplano <b>Daniel Gomez-Uchida</b>	Translocation of <i>Gobiomorphus cotidianus</i> into headwaters within a WLG ecosanctuary-a restoration case-study in developing a healthy protocol. <b>Kari Beavan</b>	Stream ecology is ripe for a scientific revolution <b>Barbara Downes</b>	New approaches to characterising groundwater in northern Australia <b>Erica Garcia</b>	
12:00-12:15pm	Innovation in wetland preservation: Reflections on four years of building puddles <b>Blair Reid</b>	Grazing clearance and rejection rates of the invasive Gold clam, <i>Corbicula fluminea</i> : A NZ case study <b>Karen Thompson</b>	The cultural values of morihana (wild goldfish) in Te Arawa lakes <b>Nicole Hunt</b>	Factors limiting the supply and retention of coarse carbon resources. in rivers with different land- use legacies <b>Wim Bovill</b>	Trend analysis <b>Linda Robb</b>	
12:15-12:30pm		On Alert: Strengthening national freshwater biosecurity through surveillance for high-risk species not naturalised in Aotearoa <b>Rachel Hooks</b>		Systems on the brink: Two decades of fish population dynamics in the Granite Creek system amid ongoing environmental change <b>Nick Bond</b>	Beyond barcodes: Unravelling aquatic food webs in native and pine forest streams using eDNA <b>Mael Marguet*</b>	
12:30-1:30pm	Lunch					

WEDNESDAY 03 DEC 2025						
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
<b>Theme</b>	<i>Aquatic biogeochemistry and ecosystem processes 1</i>	<i>Population and community ecology 2 + (from 2:45pm) Policy and Practice 2</i>	<i>Managing freshwater environments in a changing climate</i>	<i>Sam Lake session 2 + (from 2:30pm) Non-migratory galaxiid life history</i>	<i>Access2Experts: Projects and their key outcomes</i> “Access 2 Experts - delivering free expert advice to New Zealanders”	<i>Open Panel Discussion: Professional Wetland Scientist bodies and their role</i>
<b>Session Chair</b>	<b>Jenny Webster-Brown</b>	<b>Phil Jellyman</b>	<b>Erica Garcia</b>	<b>Michael Douglas</b>	<b>Raymond Chang</b>	<b>Swapan Paul</b>
1:30-1:45pm	Aged carbon in small streams: Global Patterns and evidence of drivers from coastal Australia <b>Ryan Felton*</b>	The impact of terrestrial leaf diversity on aquatic ecosystem functioning in Waikato streams <b>Martin Sarkezi*</b>	Cave critters and climate change: Thermal tolerance of the Tasmanian Mountain Shrimp (Anaspides) <b>Josh Greenhill*</b>	Birds in a NSW coastal forest and the importance of ENSO: A link inspired by Sam Lake’s drought book <b>Richard Marchant</b>	Finding practical solutions to data gaps to support management of periphyton and nutrients in Tairāwhiti Gisborne rivers <b>Mark Heath</b>	
1:45-2:00pm	Continuous monitoring of dissolved CO2 in four irrigation farm dams during the Austral summer irrigation season <b>Jackie Webb</b>	Expansions, extirpations, and extremes: lessons from 35 years of caddisfly data from Rocky Mountain subalpine wetlands <b>Hamish Greig</b>	Green farm dams: Anthropogenic water bodies as refugia for macroinvertebrates in a warming climate <b>Micalah McCulloch*</b>	What happens if the drought never breaks? Ecological and social responses to climate change in Southwest Western Australia <b>Michael Douglas</b>	EDNabling catchment care groups <b>Emma Willmore</b>	
2:00-2:15pm	Diurnal fluctuations in dissolved gases (O2, CO2, N2O) illuminate instream nutrient cycling in braided rivers <b>Naomi Wells</b>	South Canterbury Coastal Waterbodies: A synopsis of habitat characteristics, biological diversity, and community ecology <b>Sriyan Jayasuriya</b>	Living with the extremes: Life history trait responses of Deleatidium to drying pressure and floods in the Selwyn Waikirikiri River <b>Anna Meikle*</b>	Resilience of freshwater biodiversity to drought and drying in a global biodiversity hotspot <b>Belinda Robson</b>	Intergrated catchment management in Bream Bay: A collaborative action plan for water quality and biodiversity management <b>Mariana Basilio</b>	



WEDNESDAY 03 DEC 2025						
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
2:15-2:30pm	Seasonal variation in the abundance of invertebrates in alpine headwater landscapes and its effect on the nutritional landscape <b>Sithara Sirimanna*</b>	Home of the world’s largest trout: Understanding trout movement dynamics in New Zealand’s most popular sports fishery <b>Phillip Jellyman</b>	Nutrient versus non-nutrient drivers of river ecosystem health in a subtropical environment in New Zealand <b>Manas Chakraborty</b>	Sam: "Can’t you just run a PCA through it” Me: “Nup”. Instead, some much better ideas from Sam Lake’s storied career <b>Leon Barmuta</b>	Stream sampling for NZ fresh water mussels in slow moving lotic systems using eDNA <b>Neil Henderson</b>	
2:30-2:45pm	Investigating internal phosphorus loading potential in Lake Ngatu with comparisons to other Northland lakes <b>Kirill Shchapov</b>	After the cut: size and stability of populations declines after disconnecting experimental habitat networks <b>Yiwen Xu*</b>	Restoring riparian wetlands for carbon and nitrogen benefits and other critical ecosystem functions <b>Lukas Schuster</b>	Persistence under pressure: River disturbance and habitat diversity shape Galaxias anomalous distribution in the presence of brown trout <b>Gerry Closs</b>	Up the gorge without a willow: The use of local knowledge and specialist input to support willow removal in Ida Valley <b>Shelley McMurtrie</b>	
2:45-3:00pm	Lander-based approaches to measuring the <i>in situ</i> sediment-water solute flux in deep lakes: Results from Lake Wānaka <b>David Plew</b>	Walking the talk: giving effect to Te Mana o Te Wai through genuine partnership in catchment management <b>Chloe Price</b>	Warming waters and falling oxygen: Climate impacts on a deep oligotrophic lake <b>Aidan Jabbari</b>	Inferring source–sink dynamics from larval otolith signatures in a non-migratory galaxias <b>Karen Mayhew</b>	Rongo: Enabling kaitiaki through access to environmental data tools <b>Chris Keenan</b>	
3:00-3:15pm		The imperfect practice of offsetting - case studies <b>Andrew Rossaak</b>	Keeping Cool in Warming Streams: Investigating Thermoregulatory Behaviour of an Australian Alpine Caddisfly <b>Ualani Miller*</b>	Spatiotemporal population dynamics of a native landlocked migratory fish and the influence of environmental drivers <b>Liam Taylor*</b>		
3:15-3:45pm	Afternoon tea					

WEDNESDAY 03 DEC 2025						
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
<b>Theme</b>	<i>Protecting freshwater environments in the face of changing policy and regulations</i>  + (from 4:30pm) <i>Policy and Practice</i>	<i>Invasive species – detection surveillance and management 2</i>	<i>Remote sensing application in freshwater management</i>  + (from 4:30pm) <i>Wetland protection and preservation 2</i>	<i>Aquatic biogeochemistry and ecosystem processes 2</i>	<i>Science Communication</i>	<i>Ngāi Tahu freshwater claim: The journey and next steps</i>
<b>Session Chair</b>	<b>Justine Quinn</b>	<b>Brendan Hicks</b>	<b>Katie Turlington</b>	<b>Jenny Webster-Brown</b>	<b>Katharina Doebling</b>	<b>Donna Sutherland</b>
3:45-4:00pm	Ecological values of the Carrington and Taratahi water races, Wairarapa <b>Brett Stansfield</b>	Passive sampling methods for investigating phenology of the invasive bivalve <i>Corbicula fluminea</i> in the Waikato River <b>Elizabeth Graham</b>	Aquawatch: A multidisciplinary, process-based and data-driven approach to freshwater monitoring, assessment and forecasting <b>Janet Anstee</b>	Beyond Nitrate Toxicity: The Overlooked Role of Phosphorus in Nutrient Enrichment and Periphyton Growth <b>Kimberley Dynes</b>	Temporary habitat additions: a multipurpose tool for community engagement, monitoring and ecological recovery <b>Issie Barrett</b>	A new dawn for freshwater: The transformational vision of Ngāi Tahu for freshwater management in our takiwā <b>Gabrielle Huria</b>
4:00-4:15pm	For better or worse? Potential implications of proposed national wastewater environmental performance standards for freshwater quality and management <b>Juliet Milne</b>	Room for two? Assessing interactions between native freshwater mussels and invasive clams in the early stages of <i>Corbicula fluminea</i> invasion <b>Michele Melchior</b>	Mapping and monitoring Australia's inland water using remote sensing <b>Margaret Harrison</b>	Unravelling spatio-temporal dynamics of water quality and associated risks to ecosystem health of the Darling Baaka River <b>Kathryn Korbel</b>	LAWA- reflections on a decade of communicating environmental information <b>Roger Young</b>	Wai māori hauora – inviting collaborative research and monitoring to prioritise the wellbeing of freshwater <b>Anne Glackin &amp; Jessica Riddell</b>
4:15-4:30pm	Offsetting intentions and outcomes: Going beyond the models to achieve meaningful ecological gains <b>Justine Quinn</b>	Sleeper weeds awaken: Ecological shifts and management challenges of invasive macrophytes in remote springs <b>Saskia Brown*</b>	What I've learned from four years of freshwater ecoacoustics <b>Katie Turlington*</b>	Urea transformation dynamics in soil and water <b>James Latimer</b>	Learning from collaborating badly <b>Ben Gawne</b>	Korero on topic led by <b>Jessica Riddell, Gabrielle Huria and Anne Glackin</b>

WEDNESDAY 03 DEC 2025						
Room	Rakaia	Dobson 1	Dobson 2	Dobson 3	Dobson 4	Bealey
4:30-4:45pm		Tekapo Military Training Area revisited: Defining new galaxiid and salmonid population distributions with new altitude limits discovered <b>Richard Allibone</b>	Hydropedology as a tool for wetland management: A South African context <b>Wayne Westcott</b>	Vertical patterns of nitrous oxide concentration in surface and subsurface waters of braided rivers <b>Mohammad Arar*</b>	Nature Agents: A regional approach to supporting school-led freshwater monitoring and teacher engagement <b>Jessica Halsey</b>	
4:45-5:00pm		UAV mapping and GIS analysis of invasive willow within the Hakataramea catchment <b>Baily Lelieveld</b>	Predicting floodplain wetland disconnection to inform biodiversity conservation in northern Australia <b>Kaline De Mello</b>	The impacts of hydrology on stream metabolism: A comparative study of perennial and non-perennial systems <b>Ryan Shojinaga</b>	Small dataset, meaningful patterns: Community water quality monitoring in the upper Waipoua catchment <b>Alex James</b>	
5:00-5:15pm					Bridging the gap: From water samples to metrics and insights <b>Nick Snellgrove</b>	
5:15-5:30pm	Closing ceremony – <i>Dobson Foyer</i>					
6:30pm onward	<b>Conference dinner – Te Pae Convention Centre</b> <i>Theme: Circus/Carnival</i>					

THURSDAY 04 DEC 2025
<p align="center"><b>CONFERENCE FIELD TRIPS</b> Refer to <a href="#">conference website</a> for details</p>