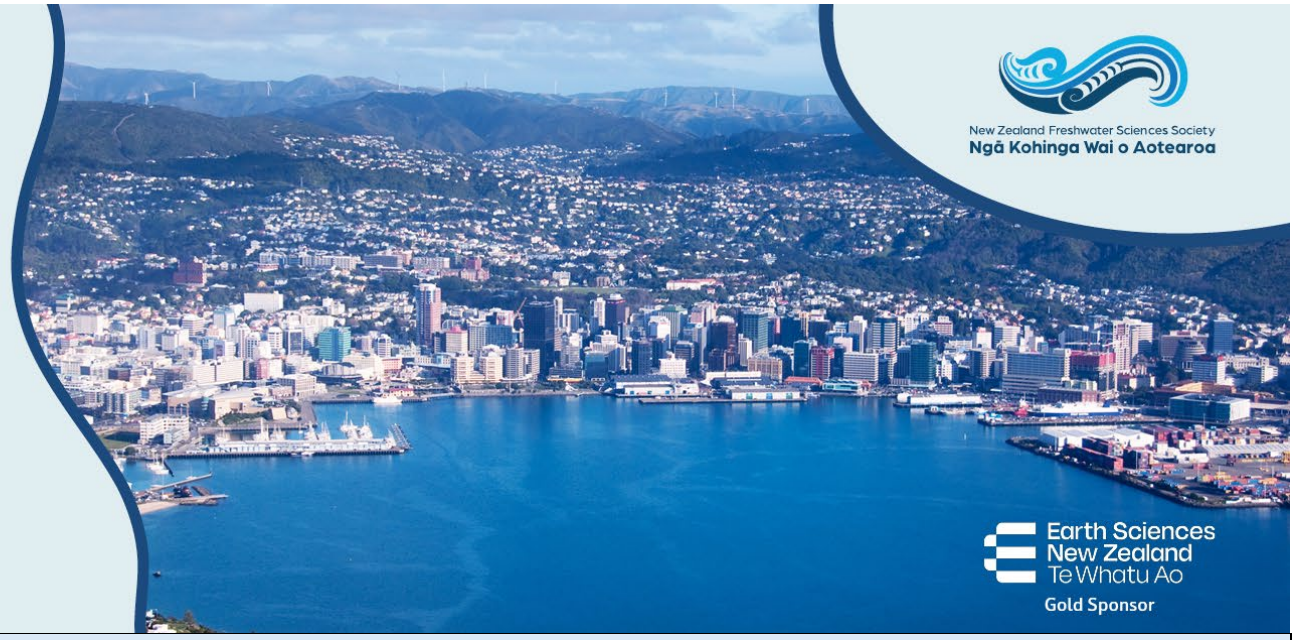
NEW ZEALAND FRESHWATER SCIENCES SOCIETY CONFERENCE 2026

At the Confluence: Communities, Catchments, and our Freshwater Futures
Ngā Rerenga E Tūtaki Ana

1-4 December | James Cook Hotel Grand Chancellor, Wellington

www.nzfssconference.co.nz



New Zealand Freshwater Sciences Society
Ngā Kohinga Wai o Aotearoa

Earth Sciences New Zealand Te Whatu Ao
Gold Sponsor

MONDAY 30 NOVEMBER 2026	
4:30pm	Registration desk & Exhibition Trade stands open
6:30pm	Pōwhiri and 2026 Conference Opening *- Chancellor 1, Level 16, Grand Chancellor*
6:45pm	Welcome Function, *sponsored by Morphum Environmental* *- Exhibition Area, Grand Chancellor*

TUESDAY 1 DECEMBER 2026	
7:00-8:30am	Early Careers Breakfast & Speed Networking Event *(ticketed event)* *- Chancellor 6*
8:45-9:00am	Day 1 Welcome *- Chancellor 1*
9:00-9:40am	**Keynote | Simon Upton,** New Zealand Parliamentary Commissioner for the Environment *- Chancellor 1*
9:40-10:30am	**Keynote | Robert McClean & Ashleigh Sagar,** Te Rūnanga o Toa Rangatira and **Jimmy Young**, GWRC *- Chancellor 1* *'Te Awarua o Porirua Action Plan - a collaborative plan that gives effect to Te Wai Ora o Parirua – Porirua Harbour Accord'*
10:30-11:00am	Morning Tea

TUESDAY 1 DECEMBER 2026

Room	Chancellor 1	Chancellor 4	Chancellor 5	Chancellor 6
Theme	*Freshwater in a time of change (Fish)*	*Disruptive Technologies*	*ICM*	*Freshwater in a time of change (General)*
Session Chair	Jasmine Dungey	Richard Storey	David Cox	Treffery Barnett
11:00-11:15am	Ciaran Campbell Conservation status of freshwater fishes in Otago	Kelly Hughes CFD Modelling of complex flows using OpenFoam and Claude AI	Ashehad A. Ali Instream sediments contribute to low flow concentrations of E. coli in rivers	Bryony Alden* Microplastics in New Zealand urban ponds and effects on amphibians raised in ponds with microplastics
11:15-11:30am	Isaac Davies Stream order and altitude interact to determine the amount of suitable habitat within a tributary for a threatened endemic galaxiid fish.	Georgia Thomson-Laing Assessing passive environmental DNA sampling for lake biodiversity monitoring	James Blyth Re-wetting techniques for Peatlands affected by lateral drainage	Olivier Ausseil Periphyton Risk Assessment under the new National Wastewater Standards
11:30-11:45am	Ciaran Campbell Restoring Native Fish Refuges Through Trout Eradication: The Boundary Creek Story	Kirill Shchapov An AI-assisted metaweb approach to inferring trophic structure from eDNA in New Zealand lakes	Anna Christensen* Warming the way: does a warmed attractant flow have the potential to enhance the elver trap and transfer program?	Treffery Barnett Do SEV-based riparian offsets deliver the ecological gains predicted at consent? An empirical assessment across Auckland stream restoration sites.
11:45-12:00pm	Jasmine Dungey Standardised fish salvage in a less than standard environment - the challenges of salvaging native fish in an urban setting.		David Cox Ben Youngman Financing Freshwater Futures	Issie Barrett What to do and in what order: practical decision frameworks for on-the-ground restoration practice
12:00-12:15pm	Brendan Hicks Torrent fish decline in a Waikato stream: a local event or evidence of a broader pattern?		Neil Deans Lynn Cadenhead Urban catchment community restoration: Tyers Stream Restoration Group, Wellington	Joanna Blaszczak What is an algal bloom in a river? Diverse algal bloom types necessitate diverse research and management needs in flowing waters
12:15-12:30pm			Markus Dengg Integrated Catchment Management in Practice: Braiding Knowledge Systems	Frank Burdon Does diversity beget diversity? Testing cross-boundary biodiversity cascades with replicated virtual river networks

(* = Student Presentation)

TUESDAY 1 DECEMBER 2026

12:30-1:30pm	Lunch **Rōpū Māori AGM** | *Chancellor 4*

Room	**Chancellor 1**	**Chancellor 4**	**Chancellor 5**	**Chancellor 6**
Theme	*Freshwater in a time of change (Lakes)*	*Freshwater in Practice: Lessons, Challenges and Better Outcome*	*ICM*	*Understanding Our Freshwaters: Ecology, Evidence and Change*
Session Chair	Tina Bayer	Ashley Webby	Rebecca Eivers	Joanne Clapcott
1:30-1:45pm	Emily Carr* Short term biological reorganisation in Lake Tūtira following Cyclone Gabrielle	Ashley Webby From barriers to better outcomes: Outcomes and lessons learnt from Greater Wellington's five-year fish passage project	Ashimi Dilhara* Wetland Plant Communities Influence the Amounts and Characteristics of Dissolved Organic Matter Leached into Estuaries	Harrison Taylor* Mechanisms Enabling Coexistence Between a Nationally Endangered Alpine Galaxiid and Introduced Salmonids in the Upper Manuherikia River
1:45-2:00pm	Susie Wood Did perch eradication reduce cyanobacterial blooms in Roto Kawau (Lower Karori Reservoir)?	Duncan Law Functional Fish Passage: Moving Beyond Design Guidelines to Ecological and Cultural Outcomes, Lessons from Ōtaki to North of Levin Te Pae o Tararua Project.	Faline Drummond Finding The Right Flow. Use of two Instream Flow Models to inform river management for species of conservation concern.	Kayla Valentine* Drifting through an urban world: macroinvertebrate diversity and drift along the Pūharakekenui | Styx River in Christchurch
2:00-2:15pm	Tina Bayer Why are our lakes getting greener? The hidden clues in plankton communities and nutrient fractions	Brett Stansfield Transmission Gully Fish Passage Remediations	Rebecca Eivers Rewetting and reconnecting riparian wetlands on intensive Waikato dairy farms to improve nutrient attenuation, flood detention, and restore indigenous biodiversity.	Joanne Clapcott Evaluating freshwater expert panels: good science, good advice, good decisions?
2:15-2:30pm	Shreesha Bhattarai* Why is Lake Hood blooming? Unravelling cyanobacterial dynamics and their drivers	Kelly Hughes Reframing Fish Passage from Single Metrics to Structured Complexity	Josette Kahotea* A novel refuge for kōaro (Galaxias brevipinnis): population demography, movement, and trophic structure in a lake-margin wetland periodically invaded by trout	Zachary Clark* Investigating the relationship between land cover and periphyton across Aotearoa New Zealand rivers

(* = Student Presentation)

TUESDAY 1 DECEMBER 2026

Room	Chancellor 1	Chancellor 4	Chancellor 5	Chancellor 6
Theme	*Freshwater in a time of change (Lakes)*	*Freshwater in Practice: Lessons, Challenges and Better Outcome*	*ICM*	*Understanding Our Freshwaters: Ecology, Evidence and Change*
Session Chair	Tina Bayer	Ashley Webby	Rebecca Eivers	Joanne Clapcott
2:30-2:45pm	Kaylee M. Campbell* Declining sediment nutrient release rates and long-term water quality recovery in Lake Rotorua	Greg Burrell Protecting lamprey during river works: lessons learnt from Canal Reserve Drain	Rebecca Eivers Prioritising wetland and riparian interventions at subcatchment scales to maximise restoration outcomes, resilience, and success across intricately connected aquatic and terrestrial ecosystems.	Dannie Cullen Rombout Ruiterkamp Monitoring in Motion: Adapting Freshwater Monitoring for Te Wai Takamori o Te Awa Kairangi
2:45-3:00pm	Gretchen Hansen Finding a safe operating space: Managing for resilience in temperate North American lakes	Danielle Cairns Beyond Business as Usual: Delivering Freshwater Ecology Under Emergency Works and Recovery Legislation	Lovisa Ekelund* Effects of dispersal and habitat characteristics on headwater macroinvertebrate distinctiveness: an in-stream experiment	
3:00-3:30pm	Afternoon Tea			

Room	Chancellor 1	Chancellor 4	Chancellor 5	Chancellor 6
Theme	*Lakes in Flux: Timing, Drivers and Responses to Change*	*Intergenerational Futures (Mō ngā uri whakatipu)*	*ICM*	*Freshwater Management in Action: Lessons from Restoration to Regulation*
Session Chair	Brendan Hicks	Juliet Clague	Christoph Matthaei	Ashley Webby
3:30-3:45pm	Edevardt Johan Danielsen* High-frequency greenhouse gas dynamics along a within-lake depth gradient. Physical structure versus ecological production in a small stratifying lake	Matika Kohu Kākahu Peke Peke Daylighting: More Than Just a Project	Scott Kusabs A shared responsibility model for looking after Lake Rotorua water quality	Melanie Dixon Global consent for wetland restoration: Queen Elizabeth Park, Kāpiti Coast.
3:45-4:00pm	Rose Gregersen Where is the management window? Quantifying leads and lags in lake eutrophication	Kelsi Hayes* Kākahi in our awa: The search for a taonga species in the rivers of Murihiku.	Christoph Matthaei Evaluation of the likely ecological impacts of aluminium, copper and zinc in Southland rivers	Alice Gilbert* Investigating the extent and impact of Didymo across Fiordland National Park.

(* = Student Presentation)

TUESDAY 1 DECEMBER 2026				
4:00-4:15pm	Megan Hamersky* Out of sync: How extreme weather events reshape temporal coherence between lakes		Mark Yungnickel You Can't Treat a Frog Like a Fish: What Freshwater Ecologists Should Know About Hochstetter's Frogs	Kimberley Dynes Applying freshwater science to farming land use consents: lessons from the Waikākahi catchment
4.30-6.00pm		Lakes Focus Group Meeting	SWIM Fish Passage Group Meeting	
6:30-7:45pm	**Public Lecture Event | *Kindly sponsored by SCANZ*** - *Chancellor 1* *'Climate change: the circuit breaker in a rapidly changing world'*			

(* = Student Presentation)

WEDNESDAY 2 DECEMBER 2026

7:30-8:30am	NZFSS Executive Committee breakfast *Venue: Pravda Café*
8:50-9:00am	Welcome – Day 2
9:00-10:15am	**Pascale Otis -** Media Elves *Kanakana/Piharau - the little living fossil* - Film Premiere View Film Trailer HERE
10:15-10:45am	Morning Tea

Room	**Chancellor 1**	**Chancellor 4**	**Chancellor 5**	**Chancellor 6**
Theme	*Lake Science in Action: Processes, Predictions and Restoration*	*Many Knowledge Systems*	*ICM* *Special Session* *Moving the Middle*	*Special Session* *Emerging Climatic Pressures programme*
Session Chair	Jamie Howarth	Neil Deans	Graham Sevicke-Jones	Juliet Clague
10:45-11:00	Sepideh Heydari* Forecasting thermal stratification in a polymictic lake	Neil Deans Eel fishery restoration at Lake Moawhitu, D'Urville Island	Graham Sevicke-Jones Moving the Middle - towards greater environmental performance	Juliet Clague Capturing transect data of Te Awa o Waikato
11:00-11:15am	Tadhg Moore From dose to decision: a process-based model for continuous alum treatment in lakes	Miranda Donovan* Learning from Lake Restoration: Towards a Relational Approach	Virginia Baker New Zealand agriculture – reframing dominant narratives and myths to reorient sustainable freshwater management	Adam Hartland Emerging Climatic Pressures on the Waikato River: acidification, deoxygenation, and an invasive filter feeder
11:15-11:30am	Brendan Hicks Fish biomass and lake ecosystem function	Linh Hoang Effects of dynamic stream shading on stream temperature across seasons and land use settings	Geoff Kaine Adopting farm practices to improve water quality: how hard can it be?	Victoria Cantalapiedra Mateo* The Effects of Freshwater Acidification on Microalgal Ecophysiology and Community Composition: A Systematic Review
11:30-11:45am	Jamie Howarth Do extreme storms provide a natural sediment capping mechanism improving the state of eutrophic lakes?	Mereana Wilson-Rooy* Kōura, Culture and Lake Health: Implementing Te Mana o te Wai through Māori-led Cultural Valuation in the Rotorua Te Arawa Lakes.	Melissa Robson-Williams Looking beyond the usual suspects: Non-conventional agents of change of positive environmental action on land	Linda Robb* Beyond nutrients: exploring the role of trace metal bioavailability in algal bloom dynamics in Lake Karāpiro

(* = Student Presentation)

WEDNESDAY 2 DECEMBER 2026

Room	Chancellor 1	Chancellor 4	Chancellor 5	Chancellor 6
Theme	*Lake Science in Action: Processes, Predictions and Restoration*	*Many Knowledge Systems*	*ICM* *Special Session* *Moving the Middle*	*Special Session* *Emerging Climatic Pressures programme*
Session Chair	Jamie Howarth	Neil Deans	Graham Sevicke-Jones	Juliet Clague
11:45-12:00pm	Ebi (Ebrahim) Hussain Trophic manipulation as an in-lake restoration tool for a shallow, dystrophic dune lake: coupled zooplankton, macrophyte and coarse fish responses at Lake Tomorata	Facilitated discussion: What does the future look like for New Zealand's significant freshwater databases? Facilitated by Megha Sethi	Geoff Kaine The influence of catchment groups: peer pressure or social learning?	Farzaneh Taheri* Mixing-regime shifts in phytoplankton–pCO2 causal relationships revealed by convergent cross mapping in Lake Karāpiro
12:00-12:15pm	Roe Stuart The mystery of the deep: Uncovering the diversity of the South Islands deep lakes		Pike Stalhmann-Brown Serious play: Tabletop games and simulations as tools for freshwater management	Emerging Climatic Pressures programme Discussion and Q&A
12:15-12:30pm	David Plew Historical warming and deoxygenation of Lake Taupō revealed by observations and three-dimensional modelling		Peter Edwards Serious games at the nexus of agriculture and sustainable freshwater management	
12:30-2:00pm	Lunch **NZFSS AGM** | *Chancellor 4*			

2:00-3:00pm	**Keynote | Stu Farrant** - Morphum Environmental, **Evan Harrison** - Greater Wellington, **Kedron Parker** and **Liz Mellish** - *Chancellor 1* *'The hidden waters of Te-Whanganui-a-Tara – understanding our past to rekindle connection and care, for future generations'*
3:00-3:30pm	Afternoon Tea
3:30-5:00pm	**NZFSS 2026 Poster Session** | *sponsored by Wilderlab. See poster presenter list below* *Also running at this time* - Endeavour Programme – Moving the Middle – Serious Games Session
6:30pm	**Student Social Event** The Arborist Rooftop Bar, 166 Willis Street, Wellington

(* = Student Presentation)

WEDNESDAY 2 DECEMBER 2026

POSTER SESSION SPONSORED BY

WILDERLAB

POSTER PRESENTATIONS *= Student Presentation			
Poster #	**First Name**	**Last Name**	**Poster Title**
1	Darien	Kissick	Following the Tide: Exploring Potential Effects of Sea Level Rise on Īnanga Spawning Habitat in the Wellington Region
2	Belinda	Margetts	Build it and they may not come: linking macroinvertebrate dispersal and establishment to freshwater restoration success
3	Ben	Marsh*	Examining macroinvertebrate distributions in the Waikato River: interacting effects of CO2-driven acidification and Gold Clam invasion
4	Joseph	Renwick*	Life History Variation in Landlocked and Diadromous Common Smelt on the Chatham Islands
5	Roe	Stuart	Where are the bullies? Gobiomorphus distribution patterns and co-occurrence dynamics in New Zealand
6	Johanna	von Hunerbein*	Does Trophic State Determine Lake Ecosystem Resilience to Extreme Weather?
7	Greta	Wathen-smith*	The effects of freshwater acidification driven by atmospheric CO_2 on shell strength of the aquatic bladder snail (Physella acuta) under projected future freshwater conditions
8	Susan	Clearwater	Understanding our rivers – a Ngā Awa perspective.
9	Juliet	Milne	From data to understanding: a new national resource to support interpretation of community-based stream monitoring data
10	Lisa	Solly*	The role of catchment groups in wetland restoration
11	Joanne	Clapcott	Fish Futures Working Group: Fifteen recommendations for freshwater fish management
12	Shelby	Defeo*	Waiheke Waterways: Community Science and Engagement for Wai Health in Aotearoa

(* = Student Presentation)

THURSDAY 3 DECEMBER 2026

9:30am	Welcome – Day 3
9:35-10:30am	**Keynote | Ross Thompson**, University of Otago *Room: Chancellor 1* '*Don't mention the rugby: trans-Tasman perspectives on freshwater ecology*'
10:30-11:00am	Morning Tea

Room	**Chancellor 1**	**Chancellor 4**	**Chancellor 5**	**Chancellor 6**
Theme	*Lake Life: Biodiversity, Disturbance and Environmental Change*	*Partnerships*	*ICM*	*Freshwater Connections: Flows, Food Webs and Environmental Change*
Session Chair	Brett Stansfield	Mark Fenwick	Simon Stewart	Ian Duggan
11:00-11:15am		Mark Fenwick Apparent stability masks limited recruitment in a long-lived freshwater mussel: insights from 12 years of citizen science monitoring	Richard Muirhead The influence of river flowrates on E. coli concentrations and contact recreation gradings in NZ rivers	Emma Norman* Simulating Streamflow: GloFAS-ERA5 Performance and Implications for Catchment-scale Forecasting in New Zealand.
11:15-11:30am	Aaron Kolder* Contrasting biological responses to human disturbance across sub-catchments in Lake Wānaka	Natalie Gilligan Christopher Drake Connecting with Awa: Collaborative Monitoring	Alton Perrie Lake productivity and non-native fish influence native fish communities in shallow, lowland lakes	Siobhan Nuri* Otolith diaries: reconstructing early lives of glass eels
11:30-11:45am	Anusha Verma* Genetic structure of Neochanna rekohua across island lakes.	Roseanna Gamlen-Greene Fleur Passau, Ngahuia Herangi, Taituwha King Investigating tuna health and parasite dynamics in a hapū-led research project at Tahaaroa Lakes	Jordan Peters* Assessment of potential global river periphyton growth risk and uncertainty in nutrient concentrations under high flows in a changing climate	
11:45-12:00pm	Joelle Lousberg* Going Global, Losing Local – Are New Zealand's lake zooplankton communities converging?	Nick Kirk Moving the Middle – Catchment groups & environmental performance on farms	Simon Stewart Assessing wetland restoration for enhancing īnanga production	Mael Marguet* Linking riparian diversity to stream food-web structure across forested stream meta-ecosystems

(* = Student Presentation)

THURSDAY 3 DECEMBER 2026

12:00-12:15pm	Ana Zupancic* Identifying seasonal and spatial variation in biodiversity in the littoral communities of Lake Rotoiti, Nelson Lakes National Park		Martin Sarkezi* Cross-ecosystem effects of leaf litter diversity on stream invertebrates and decomposition	Ian Duggan The effects of the Corbicula fluminea invasion on zooplankton in the Waikato River
12:15-1:30pm	Lunch			

Room	**Chancellor 1**	**Chancellor 4**	**Chancellor 5**	**Chancellor 6**
Theme	*Lakes: Climate Signals, Ecosystem Change and Future Risks*	*Freshwater in a time of change (general)*	*ICM*	*Freshwater: From Regulation to Relationships*
Session Chair	Deniz Özkundakci	Bram Mulling	Susan Clearwater	Andrew Roassaak
1:30-1:45pm	Deniz Özkundakci New Zealand lakes are warming, but annual trends hide contrasting seasonal climate responses	Chris Meijer 25 years of macroinvertebrate monitoring: What changes have we captured across Waitaha – Canterbury?	Channell Thoms Gorge-ous attributes, ecological sampling trial to inform parameters for monitoring gorge environments	Justine Quinn When did 'best practice' become 'negligible effect'?
1:45-2:00pm	John Pearman Stressed Lakes: A Shiny dashboard to investigate multiple stressors of lake ecosystems.	Jenni Gadd Different Laboratories, Different Answers: Implications for Environmental Monitoring and Decision-Making	Richard Storey Permanent, intermittent and ephemeral streams: what are they, why does it matter and how do you know what you've got?	Yanika Reed Closing the Gap: Improving Surveillance of Non-Naturalised Freshwater Pests
2:00-2:15pm	David Plew Modelling weed washup events in Lake Rotorua	Mika Zollner A mending approach to urban freshwater	Mark Hamer Region-wide assessment of streambed sediment metal concentrations and ecological metrics	Andrew Rossaak Streams as Infrastructure: doing better for freshwater in a time of change
2:15-2:30pm	Matthew Prentice Forecasting Lake Ecosystem Responses to Extreme Weather Events: A Novel Integrated Modelling Approach	Bram Mulling From Records to Monitoring: Developing a Monitoring Framework for Lamprey and Shortjaw Kōkopu under the NPS-FM	Richard White Prioritising management action in multi-stressor catchments	Ton Snelder Linking Changes in Agriculture to Water Quality Trends in New Zealand Rivers

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THURSDAY 3 DECEMBER 2026

Room	Chancellor 1	Chancellor 4	Chancellor 5	Chancellor 6
Theme	*Lakes: Climate Signals, Ecosystem Change and Future Risks*	*Freshwater in a time of change (general)*	*ICM*	*Freshwater: From Regulation to Relationships*
Session Chair	Deniz Özkundakci	Bram Mulling	Susan Clearwater	Andrew Roassaak
2:30-2:45pm	Andrew Rees Warmth, wind, and wanderers: a millennium of climate from Aotearoa's lakes	Maddison Jones Observations of Juvenile Kākahi Habitat	Susan Clearwater Ngā Awa and river restoration for climate resilience	Jason Smith Ka mua, ka muri. Looking Back on 500 Consents: Recurring Lessons for Freshwater Decision-Making in a Time of Change
2:45-3:00pm	Lena Schallenberg Patterns and potential drivers of fungal diversity across Aotearoa New Zealand lakes	Chris Meijer Balancing coverage and data quality: using summer students in state-of-the-environment monitoring	Mark Yungnickel Alex Reid Finding Gold: How Freshwater Ecologists Discovered Gold Clam in New Zealand and What Have We Learned Three Years On	Vicki Smith Toi Taiao ~ the confluence of Art, Ecology & Mātauranga Māori
3:00-3:15pm	Marcus Vandergoes Iconic clear-water lakes are changing: evidence from Lakes Wānaka and Wakatipu	Kiel Hards How open-source tools can augment eDNA data to drive practical impact for freshwater science	Anika Kuczynski *virtual presentation* Modelling Potential Dispersal Pathways of the Invasive Freshwater Gold Clam (Corbicula fluminea) in Lake Karāpiro Using Three-Dimensional Hydrodynamic Particle Tracking	
3:15-3:45pm	Afternoon Tea			

(* = Student Presentation)

THURSDAY 3 DECEMBER 2026

Room	Chancellor 1		Chancellor 5	Chancellor 6
Theme	*Freshwater Futures: Emerging Threats and Ecosystem Health*		*He Tangata*	*Freshwater Insights: Connecting Water Quality, Climate and Biodiversity*
Session Chair	Juliet Milne		Graham Sevicke-Jones	Lena Schallenberg
3:45-4:00pm	Gesa A. Weyhenmeyer Global Lake Health in the Anthropocene: Lessons for Freshwater Futures		Brendon Blue Following the money: Investments in lake repair in Aotearoa New Zealand	Rachel Stubbington Dry times in wet countries: the effects of past, present and future drought on biodiversity in UK river ecosystems
4:00-4:15pm	Megha Sethi Funding the future - Longevity and efficacy of environmental grants in Northland NZ		Ruby Pitiroi & Ocean Mercier Te Huringa Āhuarangi He Waimanawa: Kaupapa Māori Approaches to Groundwater Governance Under a Changing Climate	Megan Devane Informing catchment water quality management through identification of faecal sources and microbial health hazards
4:15-4:30pm	2026 Conference Close – *Chancellor 1*			
6:30pm	**Conference Dinner | *sponsored by Tonkin + Taylor*** Venue – St James Theatre, Courtney Place Theme: 'A Night at the Theatre'			

FRIDAY 4 DEC 2026

CONFERENCE FIELD TRIPS

(* = Student Presentation)