



CONFERENCE PROGRAMME WEDNESDAY 8 MAY 2019

We aim to:

1. Demonstrate our readiness to listen and respond to the needs of our partners and stakeholders across our four Domains
2. Showcase research highlights from the Deep South Challenge, including examples of where research has resulted in real-world change
3. Make time for useful interaction between researchers, partners and stakeholders
4. Share the overall shape of the Challenge's future plans (2019-24)

8.30 Arrival tea and coffee

9.00 Mihimihi | **Otene Reweti, Ngāti Whatua, Ngapuhi**

Opening remarks | **Roger France, Chair, Deep South Challenge**

Opening address: Penny Hulse

From the frontline: The challenges of adapting to climate change

10.00 Keynote: Kathy Jacobs

Managing Climate Risk: The Realities of Science and Decision Making

10.45 Morning tea

11.15 Deep South Challenge Panel: He wai ora

Water availability in our changing climate and the impact on our communities

Chair: Simon Wilson (NZ Herald)

Wendy Henwood, Massey University

Lani Kereopa, Te Arawa Climate Change Working Group

Jenn Purdie, Meridian Energy

James Hughes, Tonkin + Taylor

Blair Dickie, Waikato Regional Council and MfE

Andrew Tait, NIWA

12.30 Lunch

13.30 Deep South Challenge Panel: Kei aku ringa taku āpōpō

Hapū and iwi Māori taking the future into their own hands and what the rest of Aotearoa can learn

Chair: Mihingarangi Forbes (The Hui)

Aroha Spinks, Massey University

Matapura Ellison, Kāti Huirapa Rūnaka ki Puketeraki

Melanie Mark-Shadbolt, Ministry for the Environment

Ngarimu Blair, Ngāti Whatua Orakei

Sandy Morrison, University of Waikato

Shaun Awatere, Manaaki Whenua Landcare Research

14.45 Afternoon tea

Activity: Building the Deep South Challenge Toolkit

16.15 Deep South Challenge Panel: Kua tārewa te mānuka

From community and legal pressure to ethics, policy and insurance: what will really make us start adapting to climate change?

Chair: Patrick Creadon (Stuff NZ)

Huhana Smith, Massey University

Janet Stephenson, University of Otago

John Mauro, Auckland Council

Lisa McLaren, Generation Zero

Rob Bell, NIWA

Tim Grafton, Insurance Council

17.30 Wrap-up and close

17.30 – Cocktail function

19.00 Blue Water Black Magic Gallery, Maritime Museum



Notes on our Presenters

Opening address: Penny Hulse

Penny Hulse is a New Zealand politician, and was Deputy Mayor of Auckland from the formation of the Auckland Council Super City until 2016. She continues to represent the Waitakere ward on the Auckland Council and is Chair of the Environment and Community Committee. Penny has strong links with her community and cares passionately about the Auckland region. Penny's special areas of interest are Climate Change, Sustainable City Development, Environmental Advocacy, Community Development and Youth.

Keynote: Kathy Jacobs

Katharine Jacobs is Director of the Center for Climate Adaptation Science and Solutions (CCASS) at the University of Arizona. Kathy directed the third National Climate Assessment in the United States and served in the White House (Obama Administration) as lead advisor to the President's Science Advisor on water policy and climate adaptation. She has more than two decades of experience as a water manager in Arizona and builds large-scale collaborative projects between academia and decision-makers. Her research interests include water policy, connecting science and decision making, stakeholder engagement, and the use of climate information for water management applications, climate change adaptation and drought planning. Kathy is also a member of our Independent Science Panel.



Panel: He wai ora

Water availability in our changing climate and the impact for our communities

Panel Chair: [Simon Wilson](#)

Simon Wilson has been writing about sustainability issues for years and is one of New Zealand's top journalists. Currently writing for the New Zealand Herald, Simon is the former editor of The Spinoff, Metro, Cuisine and Consumer magazines. He's also been chief subeditor for the Listener and commissioning editor for book publisher AH & AW Reed. Simon has won many awards for his journalism, both as a writer and an editor, including two Canon Magazines of the Year. He's the only editor to have achieved this feat with two different magazines (Metro and Cuisine).

Panelists:

[Andrew Tait, NIWA](#)

Andrew Tait is the Chief Scientist – Climate, Atmosphere and Hazards at NIWA. Until very recently he was the science lead of the Deep South Challenge Impacts & Implications Programme. Andrew also co-led the programme's forerunner, Climate Change Impacts and Implications (CCII) from 2012 to 2016. Andrew is well-known and well-respected among the Challenge's diverse stakeholder and partner communities. He fosters and promotes effective end-user communication of climate science and its applications.

[Blair Dickie, Waikato Regional Council and the MfE](#)

Blair Dickie is Principal Strategic Advisor at the Waikato Regional Council and is currently on part-time secondment to the Ministry for the Environment's Essential Freshwater Taskforce. He has been involved in climate change issues for many years. He originally worked as a scientist before retraining in public policy and has a special interest in finding successful solutions to climate change issues, particularly the interface between water management and climate change. Blair has provided resource management advice to Waikato Regional Council, helping the Waikato to sustainably adapt to the opportunities and constraints of an increasingly climate-influenced environment.

[James Hughes, Tonkin + Taylor](#)

James Hughes is an Infrastructure Resilience Specialist with Tonkin + Taylor. He leads the Deep South Challenge project "Stormwater, wastewater and climate change." James's work focusses on resilience to hazards (including climate change), risk assessments and project sustainability, and he's applied his skills both to major civil engineering projects and strategic studies. His recent work looks at urban infrastructure resilience and includes the Rockefeller 100 Resilient Cities Project. He's the lead author of a risk management scoping guidance for the proposed Local Government Risk Agency. James works closely with the University of Auckland and regularly speaks and presents at climate resilience conferences and seminars.

[Jen Purdie, Meridian Energy](#)

With a PhD in climate forecasting, Jen Purdie has over 20 years' experience in New Zealand climate science and its application to water resources. At Meridian, Jen is responsible for managing wind and water forecasting and planning generation, with a particular focus on climate change. She has published widely on hydro-climatological forecasting and about the impacts of climate change on renewable energy in New Zealand. She has also presented on these subjects at national and international conferences. Before working for Meridian Energy, Jen worked as a climate scientist at Topoclimate South, a climate and soils research project in Southland.

[Lani Kereopa, Te Arawa Climate Change Working Group](#)

Lani Kereopa represents tangata whenua on the Te Arawa Climate Change Working Group – a partnership project with Te Arawa Lakes Trust & Scion. The group has been set up to help Te Arawa iwi and hapū tackle the growing issue of climate change, and to ensure that tangata whenua are leading discussions about what can be done on a local level. A teacher, journalist and community researcher, Lani lives in Ihinemutu – a papa kāinga near Rotorua. Lani is a Te Komiro o te Utuhina member and is passionate about cleaning up and restoring the Te Utuhina stream and supporting children to look after and enjoy their local waterways.

[Wendy Henwood, Massey University](#)

Wendy Henwood (Te Rarawa, Ngai Tupoto) led the Deep South Challenge research project “Drinking water in Te Hiku o Te Ika.” The project explored the quality and sustainability of water supply in Te Hiku o te Ika (Northland), to contribute to the well-being and viability of these communities into the future. The research brought together mātauranga about water and climate with hydrological information about future water supply. Wendy is actively involved with marae, hapū and iwi affairs. She has a background in community public health and community development. Other recent research projects have included “Te Mauri o Te U-kai-po: intergenerational experiences of environment and well-being of an iwi”, and “Interconnections: the links between whānau and marae in Te Rarawa”.



Panel: Kei aku ringa taku āpōpō

*Hapū and iwi Māori taking the future into their own hands
and what the rest of Aotearoa can learn*

Panel Chair: [Mihingarangi Forbes](#)

Mihingarangi Forbes is an award-winning investigative journalist, as well as an accomplished facilitator of debates and events. Mihi has a wide brief – as a current affairs presenter, one day she might be interviewing Prime Minister Jacinda Ardern on the lawn at Waitangi, the next she might be interviewing whānau about state abuse or climate change (earlier in 2019, for example, The Hui ran a story looking at the race against time to save some of our oldest urupā from the rising tides). In her 20 years of journalism, she has worked across programmes such as The Hui, Campbell Live, Native Affairs, 60 Minutes and 20/20. Mihi has a strong interest in history and fronts the New Zealand Land Wars series, Stories of Ruapekapeka.

Panelists:

[Aroha Spinks](#), [Taiao Raukawa](#)

Aroha Spinks is an environmental scientist working with the Taiao Raukawa environmental research unit. Aroha is a member of the research team working on the Deep South Challenge project, “Risk management for Māori coastal assets,” which also had a pre-cursor Challenge project, “Climate Change & Coastal Māori Communities.” Both projects draw on Māori-led, interdisciplinary action research which prioritises social engagement when considering how to respond to sea level rise and other climate change impacts. Aroha is an Ōtaki resident and has just completed her PhD in Resource and Environmental Planning at Massey University, supporting ngā hapū leading the restoration project for Lake Waiorongomai.

[Matapura Ellison](#), [Ngai Tahu](#)

Matapura Ellison is the Relationship Manager at Ngai Tahu and Chair of Kati Huirapa Runaka ki Puketeraki. Matapura’s parents fostered his interest in his Kāi Tahu, Taranaki and Pākehā heritage from an early age. He is a staunch advocate for good governance. Matapura is involved with the Puketeraki marae and works as a Māori Warden. He played a key role in initiating the Cultural Mapping Project, to “empower our people to understand the landscape” and to “use that historic picture... in the tenure review process”. Ngai Tahu are one of the first iwi to create an iwi-wide climate change strategy, “Ngā Mātāpono Kaitiaki”. The strategy provides direction across the whole spectrum of Ngāi Tahu interests, assets and activities, because the impacts of climate change will touch them all.

[Melanie Mark-Shadbolt, Ministry for the Environment](#)

Melanie (Ngāti Kahungunu, Ngāti Porou, Te Arawa, Te Āti Awa, Ngāti Raukawa and Ngāti Tūwharetoa) is the Kaihautū or Chief Māori Advisor at the Ministry for the Environment. She provides advice and leadership towards a greater understanding of Te Ao Māori and tries to ensure that MfE's strategic approach is consistent with Māori aspirations and values. Melanie is also the Māori Manager for New Zealand's Biological Heritage National Science Challenge and a founding member of Te Tira Whakamātaki: the Māori Biosecurity Network. Her research spans a number of areas, including biodiversity, plant pests and the urban battlefield, disaster risk reduction and the effects of the Canterbury earthquakes on Māori.

[Ngarimu Blair, Ngāti Whātua Ōrākei Trust](#)

Ngarimu Blair is one of Auckland's most influential Māori leaders. He is the deputy chairman of Ngāti Whātua Ōrākei Trust, director of Ngāti Whātua Whai Rawa and chairman of the Ngāti Whātua Treaty Settlement Protection Team. Blair is on the board of the Building Better Homes, Towns and Cities National Science Challenge, and is a director at Manaaki Whenua Landcare Research. Blair is also co-chair of the Mana Whenua Kaitiaki Forum, a collective of the 19 hapū and iwi authorities across Tāmaki Makaurau.

[Sandy Morrison, Vision Mātauranga Programme Leader](#)

Sandy Morrison (Ngāti Whakaue, Ngāti Maniapoto, Ngāti Rārua ki te Tau Ihu, Ngāti Tama ki te Waipounamu) is Assistant Dean of Māori and Indigenous Studies at Waikato University, and is the science lead of the Deep South Challenge's Vision Mātauranga research programme. Sandy also leads the Challenge project, "Te Tai Uka a Pia: Iwi relationships with the Southern and Antarctic Oceans," and is a team member of the research project, "Culture and Climate Change." Sandy is tribally grounded, globally informed and whānau-tested against the everyday realities in which whānau exist. Sandy employs a strengths-based approach to teaching and research and believes that every student brings a range of experiences, ancestral knowledge, memory and insights into the teaching space.

[Shaun Awatere, Manaaki Whenua Landcare Research](#)

Shaun Awatere (Ngāti Porou) is a senior kairangahau Māori and resource economist at Manaaki Whenua Landcare Research, in Hamilton. Shaun led the Deep South Challenge project, "Climate-resilient forestry & horticulture," which incorporated the values of Māori landowners into economic modelling about future land use in Te Tairāwhiti. Shaun has just been appointed to the expert panel charged with working out how New Zealand's vulnerability to climate change will be assessed – the National Climate Change Risk Assessment panel. He also co-leads the Ngā Pae o te Māramatanga Platform Project, "Future Proofing Māori Development Opportunities: Huringa Rangī Huringa Oranga," a transformative approach to maximise the well-being of communities in response to climate change: the most significant challenge facing our whānau, hapū and iwi.



Panel: Kua tārewa te manuka

*From insurance, community and legal pressure to ethics, policy and insurance:
what will really make us start adapting to climate change?*

Panel Chair: [Patrick Crewdson](#)

Patrick Crewdson is the editor-in-chief of Stuff NZ. In his editorial that launched the new Stuff NZ climate change platform – “Quick! Save the Planet!” – Patrick wrote, “We need systemic change that shifts communities, companies and countries.” Patrick was formerly head of news for The Dominion Post and has also been a reporter for Herald on Sunday. He’s been the editor of Stuff NZ since 2014, and under his editorship, Stuff won Website of the Year at the 2018 Voyager Media Awards.

Panelists:

[Huhana Smith, Whiti o Rehua School of Art, Massey University](#)

Huhana Smith (Ngāti Tūkorehe and Ngāti Raukawa) is a visual artist, curator and researcher who engages in major environmental, trans-disciplinary, kaupapa Māori and action-research projects. Huhana leads the Deep South Challenge project, “Risk management for Māori coastal assets,” which also had a pre-cursor Challenge project, “Climate Change & Coastal Māori Communities.” Huhana’s research draws on mātauranga Māori and western sciences to devise climate solutions for coastal Māori lands in Horowhenua-Kāpiti. In her complex environmental projects, innovative research techniques lead to extraordinary outcomes, particularly exhibitions.

[Janet Stephenson, Centre of Sustainability, University of Otago](#)

Janet Stephenson is passionate about collaborative, interdisciplinary research. Janet leads the Deep South Challenge project, “Climate adaptation, vulnerability and community well-being”. Her research interests include indigenous resource management; the interconnections between people and their local environments; and the role of individuals and organisations in the transition to a sustainable future. Janet chairs the National Energy Research Institute, and is on the Cross-Agency Government Committee for the Ministry of Transport’s Transport Knowledge Hub. She’s the Director of the Centre for Sustainability, an interdisciplinary research centre at the University of Otago. Janet also leads a Sustainable Seas National Science Challenge project about ecosystem-based management in the marine environment, and a GREEN Grid project about the socio-technical changes shaping the future of New Zealand’s electricity system.

[John Mauro, Auckland Council](#)

John Mauro is Auckland Council’s first Chief Sustainability Officer. John’s focus is on unlocking the potential of Auckland’s low carbon transformation, building climate resilience, and leading by example through business and operational practices (from building portfolio to procurement, from fleets to financing). The aim is that all of Auckland Council’s activities deliver smarter sustainability

outcomes. John has over 20 years of experience in climate policy, research and advocacy. He came to Auckland from Seattle, where he worked as Policy Director for a transport not-for-profit, helped deliver the US Mayor's Climate Protection Agreement and Seattle's first climate plan while in the Mayor's Office of Sustainability and Environment, and ran an organisation dedicated to smart growth policy and advocacy.

[Lisa McLaren, Generation Zero and the Zero Carbon Act campaign](#)

Lisa is the National Convenor of the Zero Carbon Act campaign, run by Generation Zero. She became involved in climate change activism in 2011 and has been a youth delegate to UN climate talks in both Paris and Warsaw. She has worked for the last four years in local government, with roles in resilience policy and emergency management. Lisa is currently undertaking a PhD at the Joint Centre for Disaster Research at Massey University. Her research explores how citizen-led science can be used as a tool for coastal community groups to adapt to increasing erosion, storm damage and sea level rise in Aotearoa and the wider South Pacific.

[Rob Bell, NIWA](#)

Rob Bell is NIWA's Principal Scientist – Coastal and Estuarine Physical Processes, and is also a researcher on the Deep South Challenge project, "National flood risks & climate change." Rob is involved in diverse areas of coastal engineering, coastal oceanography, natural hazards, risk assessment, water quality and climate change impacts and adaptation. Rob was a lead author of the 2017 Coastal Hazards and Climate Change guidance for local government, published by the Ministry for the Environment, and was a contributing author of the recent implementation guidance on coastal hazard policies in the NZ Coastal Policy Statement. Rob speaks regularly in the media on coastal processes, climate change and hazard and risk matters. He's a certified Hearings Commissioner under the Making Good Decisions programme, a chartered member of the Engineers NZ and a Chartered Professional Environmental Engineer.

[Tim Grafton, Insurance Council of New Zealand](#)

Tim Grafton is the Chief Executive of the Insurance Council of New Zealand (ICNZ) and the chair of the Deep South Challenge's Representative User Group (the RUG). He speaks regularly about the implications of climate change for insurance in New Zealand. Tim has a strong understanding of the machinery of government and an extensive knowledge of post-disaster recovery issues and insurance regulation. He's a Chartered Member of the Institute of Directors, on the Executive Committee of the Global Federation of Insurance Associations, chairs the Code Compliance Committee of the Fair Insurance Code, and is on the New Zealand Advisory Board of the Australia and New Zealand Institute of Insurance and Finance as well as the Advisory Board of Victoria University of Wellington's Chair in the Economics of Disasters.