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# Welcome

Welcome to the 2022 New Zealand Coastal Society Conference, themed Small Islands, Big Ocean | Ko ngā moutere iti - Ko ngā moana nui. The theme was compiled to stimulate discussion and highlight the challenges and opportunities faced by our sensitive coastal environment and communities.

The 2022 NZCS conference marks 30 years since the first NZCS gathering at Wellington in 1992. This Waiheke Island conference is extra special - it has been three years since our last event in Invercargill due to Covid-19 restrictions.

Our executive committee is excited to bring the annual conference to Waiheke Island, which has stunning beaches, a strong coastal community and feels a world away from New Zealand's largest city.

Over the duration of the conference, we'll hear from a range of speakers on topics that further our understanding of Aotearoa's sensitive marine environment. We'll also spend an afternoon visiting some of Waiheke's special coastal locations to witness the challenge of balancing demand for coastal use with increasing social, cultural, and environmental needs and expectations. Our hope is that you'll take some practical learnings from the conference and reconnect with your New Zealand Coastal Society peers.

We'd like to thank the local organising committee, led by Connon Andrews, for making the Waiheke Island conference happen. A warm thank you also goes to Terry Hume who laid the groundwork for this conference in 2020 prior to the decision to postpone the event.

This year we've gone digital with our handbook – if you prefer a hard copy we encourage you to print it and bring it with you. All conference information can be found on our 2022 Conference website.

Noho ora mai

**Amv and Mark** 

New Zealand Coastal Society Co-Chairs



# Wifi connection details

In Mawhitipana room (main conference room) Network: Waiheke Guest Password: WaihekeResort In restaurant and breakout rooms Network: Waiheke Island Resort Password: WaihekeResort

# **Programme**

### **Tuesday 22 November**

6.00 – 7.00pm	Registration
6.00 – 8.30pm	Ice breaker reception Waiheke Island Resort Palm Beach

### Day 1: Wednesday 23 November

8.00 – 9.30am	Registration and tea/coffee (Refuel Station – Waiheke Island Resort Palm Beach)
9.30 – 10.00am	Mihi Whakatau Welcome and Conference Opening by NZCS Co-Chairs Mark Ivamy and Amy Robinson
10.00 – 10.45am	KEYNOTE ADDRESS: Mark Dickson
10.50 – 11.05am	Morning Tea
11.10am – 12.30pm	Plenary Session
12.30 – 1.35pm	Lunch/AGM
1.40 – 2.25pm	KEYNOTE ADDRESS: Raewyn Peart
2.30 – 3.30pm	Plenary Session
3.30 – 3.55pm	Afternoon Tea
4.00 – 5.00pm	Plenary Session

# Day 2: Thursday 24 November

7.30 – 8.45am	Eric Verstappen Young Professionals Breakfast Arcadia Cafe, 39 Palm Beach Road
8.00 – 8.55am	Registration
8.55 – 9.45am	KEYNOTE ADDRESS: Marama Muru-Lanning
9.50 – 11.10am	Plenary Session
11.10 – 11.35am	Morning Tea
11.40am – 1.00pm	Plenary Session
1.00 – 5.00pm	Field trips
6.00 – 7.00pm	Pre-dinner drinks Wild on Waiheke, 82 Onetangi Road
7.00pm – late	Conference dinner Wild on Waiheke, 82 Onetangi Road

# Day 3: Friday 25 November

8.30 – 8.55am	Registration
9.00 – 9.45am	KEYNOTE ADDRESS: Paul Kench
9.45 – 10.15am	Morning tea
10.20am – 12pm	Plenary Session
12.00 – 12.30pm	Conference closing and awards
12.30pm – 1.30pm	Lunch
1.30pm	Conference concludes

# Integrated sustainable marine solutions

# Expertise in marine and coastal services:

- Environmental advice on marine and coastal projects
- Identifying coastal management and development issues
- Ecological and Landscape assessments
- Nature-based solutions
- Eco-engineering/Ecological enhancement of artificial structures
- Habitat restoration and rehabilitation
- GIS analysis
- Taxonomy laboratory services
- Assessing and mitigating effects on coastal and marine environments
- Managing resource consent applications
- Marine and coastal landscape design

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# **New Zealand Coastal Society**

#### Who are we?

NZCS members represent a wide range of coastal science, engineering, management and planning disciplines. They are employed in the engineering and environmental consulting sectors, in local, regional and central government, in research institutes, in the tertiary education sector, and in schools.

NZCS is a technical group of Engineering New Zealand. The multi-disciplinary nature of coastal management in New Zealand means many of our members are from areas other than engineering. There are no entry criteria for our society and we welcome membership enquiries from anyone with an interest in the coast.

#### **Our Mission**

To take a leading role in facilitating robust discussion and nationally-coordinated interactions to better manage and learn about our coastal and marine environment.

#### **Our Vision**

Sustainable management of New Zealand's coastal and marine environment underpinned by sound science, engineering and policy practice, comprehensive monitoring, involved communities and effective national networks.

#### **Our Values**

The NZCS will promote this vision by being: professional, communicative, apolitical and responsible. The NZCS will work supportively with others with common interests.

#### What we do

- Support you with first class professional development and networking opportunities at regional seminars and events.
- Hold an annual conference where more than 130 local and international experts across a range of coastal management disciplines gather to share their knowledge and experience. We also host the bi-annual Australasian Coasts and Ports Conference.
- > Keep you informed with current research and best practice through our premier journal (Coastal News) published three times a year.
- > Recognise your achievements in research or advocacy on coastal issues through a series of awards and prizes.
- > Further your professional development with a scholarship to support research projects.
- Keep you informed of upcoming events, news and job opportunities in our regular email digest.
- Support your career progression by publishing your work (e.g. books, best practice guides, educational material).

# Management Committee

The Management Committee is responsible for the policy and administration of the New Zealand Coastal Society. The committee members are elected each year at the AGM, held at the Society's annual conference.

Chair(s) Amy Robinson and Mark Ivamy

Colin Whittaker **Deputy Chair** 

Treasurer Michael Allis **Deputy Treasurer** Ryan Abrey **Professional Development** Sam Morgan

Coordinator

**Regional Coordinators** Connon Andrews and Ryan Abrey

Colin Whittaker

Tom Fitzgerald and Bryony Miller

**Coastal News and Special** Ana Serrano and Don Neale

**Publication Coordinators** 

**Awards and Scholarships** 

**University & Education** 

Coordinator

Coordinators

**Central Government Liaison** Jenni Fitzgerald

NZCS Administrator/Coordinator Renee Coutts and Belen Rada

Michael Allis **Special Projects Coordinator** 

Coastal News Editor Charles Hendtlass

# **Conference Organising Committee**

NIWA Connon Andrews (Chair) **Andrew Allison** NIWA

**Cat Davis** 4Sight Consulting (Part of SLR) Mark Ivamv Bay of Plenty Regional Council

**Relen Rada** Waimakariri District Council

Lara Clarke Auckland Council Matthew McNeil **Auckland Council** Patrick Knook Tonkin + Taylor

Colin Whittaker University of Auckland

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# **Keynote Speakers**



#### **Dr Marama Muru-Lanning**

Director James Henare Research Centre/Associate Professor Anthropology

The University of Auckland/Waipapa Taumata Rau

Marama is dedicated to transdisciplinary research with Māori communities that prioritises equity. As an environmental anthropologist, she focuses on the cultural specificity of tangata whenua groups and their unique sense of place and belonging in Aotearoa. Her professional expertise includes building research relationships with Māori communities, knowledge

production and research ethics and methods. What distinguishes her internationally as a social scientist is her specialisation in four interrelated areas of research:

1. Water (Waimaori & Waitai); 2. Human-environment relationships; 3. Mātauranga Māori; 4. Transdisciplinary research methods.

She leads interdisciplinary research teams and has research collaborations with other University of Auckland groups including projects in Robotics, Civil Engineering, Infrastructure, Data Sovereignty and Kaumātua Hauora.



Raewyn Peart

Policy Director Environmental Defence Society

Raewyn holds the degrees of Bachelor of Social Science, Bachelor of Commerce, Bachelor of Laws and Masters of Commerce. She has more than 30 years professional experience in environmental law and policy and heads EDS's highly-regarded environmental policy think tank. Raewyn has published widely on coastal and marine issues including major books on coastal development, dolphin protection, fisheries management and the

environmental history of the Hauraki Gulf. She has recently overseen investigations into marine spatial planning, aquaculture, the resource management system, the conservation management system and oceans reform.

Raewyn was a member of the Ministerially-appointed Resource Management Review Panel which led a comprehensive review of the resource management system in Aotearoa New Zealand and the Ministerial Advisory Committee tasked with progressing the recommendations in the Sea Change Tai Timu Tai Pari marine spatial plan for the Hauraki Gulf. She is currently a member of the Hauraki Gulf Fisheries Plan Advisory Group. In 2019 she was appointed a Member of the New Zealand Order of Merit for services to environmental and conservation policy.



#### Mark Dickson

Associate Professor School of Environment, University of Auckland

Mark is an Associate Professor at the School of Environment, University of Auckland. He studied at Massey and Wollongong and undertook postdocs at Bristol and NIWA. Much of his research career has focused on trying to understand the drivers of coastal erosion, particularly on cliffed coasts. He is interested in a broad range of coastal management challenges,

including anticipating future coastal change under rising sea levels. Mark has published widely on various aspects of coastal geomorphology, engineering and management. He collaborates on a number of international projects but is currently focused on New Zealand-based research, including the coastal theme of Resilience to Nature's Challenges Science Challenge and a Marsden project on marine terraces.

Effective planning for coastal adaptation to sea-level rise (SLR) requires anticipating the future rate of SLR and the likely morphological response of the coast, both of which are uncertain. The science of coastal flooding under SLR is relatively advanced, but the effects of SLR on future coastal change (erosion and accretion) are less well understood. This gap in our knowledge has relevance for decision making about the impacts of SLR on communities and the things they value.

This talk introduces how historic imagery from New Zealand's Crown Archive and recent satellite imagery are being used to consistently map plan-form coastal changes around Aotearoa over the past 80 years. This is the first national coastal erosion stock take since the pioneering work of Gibb (1978) and is being conducted within the Coastal Programme of the Resilience to Nature's Challenges National Science Challenge. The national coastal change database will be publicly available by the end of 2023 and will provide a much-needed baseline against which to evaluate future change. This talk will describe our approach, provide an overview of where we are up to, and introduce how stakeholders can access and utilise the data being produced, which is suitable for local, regional and national-scale analyses. The talk will conclude by highlighting several case studies from around the country that are shining new light on fascinating but complex patterns of coastal change around New Zealand.



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#### **Paul Kench**

#### Professor of Tropical Coastal Change National University of Singapore

Paul is currently Professor of Tropical Coastal Change at the National University of Singapore. As a coastal scientist he has worked extensively on coastal hazards and management problems in New Zealand and the tropics. A major theme of his work has focused on understanding the evolution and dynamics of coral reefs islands in response to climatic variability and

sea level change. He has worked extensively in atoll nations in the Pacific and Indian Oceans. His research has made a significant contribution to global discussions of the physical stability of small island nations resulting in his appointment as science expert by the Japanese delegation at the UN Third International Conference on Small Island Developing States, Apia Samoa and an invitation to address the Kiribati side event at the UN General Assembly (2018), presenting his work on understanding the physical vulnerability of atoll islands to climate change. Graduating with his PhD from the University of New South Wales, Professor Kench has held academic positions at The University of Melbourne, Australia; the University of Waikato and University of Auckland, New Zealand, and Simon Fraser University, British Columbia, Canada.





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- Expert Witness Evidence