

National **SCIENCE** Challenges

**SUSTAINABLE
SEAS**

.....

Ko ngā moana
whakauka

**Annual Conference
programme**

5 - 7 November 2018

Mac's Function Centre, 4 Taranaki St Wharf, Wellington

Monday 5 November 2018

8.45 – 9.30 **Registration**

9.30 – 10.10 **Mihimihi** by Te Ātiawa

Welcome Sir Rob Fenwick, Chair, Sustainable Seas NSC

Introduction Julie Hall, Director, Sustainable Seas NSC

10.10 – 10.40 **Morning tea**

10.40 – 12.10 **Enabling ecosystem-based management**

Introduction: Ecosystem-based management principles for Aotearoa

Carolyn Lundquist, NIWA/University of Auckland

Participatory processes for multi-use marine environments

Richard Le Heron, University of Auckland

Understanding values for ecosystem-based management Jim Sinner, Cawthron Institute

Tūhonohono: Tikanga Māori and the Law Robert Joseph, University of Waikato

Community Engagement in EBM: The Ōngātoto/Maketū Estuary Restoration

Patrick Barrett

Mauri Moana, Mauri Tangata, Mauri Ora: How do New Zealanders value marine ecosystems? Shaun Awatere, Manaaki Whenua Landcare Research

Lessons learnt in Tasman and Golden Bays Judi Hewitt, NIWA/University of Auckland

Questions and discussion **Chair:** Janet Stephenson, University of Otago

12.10 – 13.10 **Lunch**

13.10 – 14.30 **Towards a sustainable blue economy for Aotearoa**

Introduction Judi Hewitt, NIWA/University of Auckland

Transitioning in practice: plotting pathways to a blue economy in Aotearoa - New Zealand Nick Lewis, University of Auckland

Huataukāina Tō Iwi E: Bioactives from Tairāwhiti kīna Matt Miller, Cawthron Institute

Understanding the social licence of NZ marine industries Jim Sinner, Cawthron Institute

Early detection of HAB (harmful algal blooms) Jonathan Banks, Cawthron Institute

Linking biodiversity and marine ecosystem values using ecosystem services

Vera Rullens, University of Waikato

Coastal acidification mitigation strategies Cliff Law, NIWA

Whai Rawa, Whai Mana, Whai Oranga: Creating a world-leading indigenous blue marine economy John Reid, University of Canterbury. Shaun Awatere, Landcare Research. Jason Mika, Massey University

Questions and discussion **Chair:** Judi Hewitt, NIWA/University of Auckland

14.30 – 15.40 **Developing EBM decision-making tools**

Introduction Chris Cornelisen, Cawthron Institute

Ecosystem models: Atlantis Vidette McGregor, NIWA

Interactive tools: Tracking plastic in the ocean Heni Unwin, Cawthron Institute

Interactive tools: Bayes Net tool for Tasman-Golden Bays Ross Vennell, Cawthron Institute

Defining the marine habitat used by seabirds David Thompson, NIWA

Incorporating multiple stressors in decision support tools Richard Bulmer, NIWA

Questions and discussion **Chair:** Chris Cornelisen, Cawthron Institute

15.40 – 16.15 **Afternoon tea**

16.15 – 17.30 **Session for Māori research partners and stakeholders**

The main aim of this session is to encourage discussion. There will be a brief presentation on Phase 1 research highlights and the plans for Phase 2 followed by a panel discussion.

Chair: Rob Murdoch, NIWA/Ministry of Business, Innovation and Employment

17.30 – 19.00 **Conference drinks + posters, sci-art and digital tools**

Tuesday 6 November 2018

8.30 – 9.00 **Registration**

9.00 – 10.25 **Understanding degradation and recovery (Part 1)**

Introduction Conrad Pilditch, University of Waikato

Ecosystem connectivity: tracking biochemical fluxes to inform EBM
Steve Wing, University of Otago

Tipping points - soft sediments Candida Savage, University of Otago

Stressor footprints and dynamics Craig Stevens, NIWA/University of Auckland

Te Tāhuhu Matatau Ao Tangaroa: Using science to support kaitiaki
Regan Fairlie, Manaaki Te Awanui

Questions and discussion **Chair:** Conrad Pilditch, University of Waikato

10.25 – 11.00 **Morning tea**

11.00 – 12.05 **Understanding degradation and recovery (Part 2)**

Tipping points - rocky reefs Nick Shears, University of Auckland

Submarine Canyons Daniel Le Duc, NIWA

Navigating marine social-ecological systems -enabling collaboration on cumulative effects Kate Davies, NIWA

Quantifying marine biodiversity using environmental DNA
Gert-Jan Jeunen, University of Otago

Measuring ecosystems services and assessing impacts Drew Lohrer, NIWA

Questions and discussion **Chair:** Carolyn Lundquist, NIWA

12.05 – 13.30 **Lunch + posters, sci-art and digital tools**

13.30 – 14.45 **Addressing risk and uncertainty**

Introduction Judi Hewitt, NIWA/University of Auckland

Changes in nature and the nature of change – implications for assessing risk and uncertainty in the real world Simon Thrush, University of Auckland

Place-based art and science: connecting communities Gabby O'Connor, NIWA

Including uncertainty in biodiversity layers in decision support tools
Fabrice Stephenson, NIWA

Uncertainty in mapping of the pollution removal ecosystem service
Emily Douglas, University of Waikato

Novel risk assessment tools for EBM Graeme Inglis, NIWA

Questions and discussion **Chair:** Judi Hewitt, NIWA/University of Auckland

14.45 – 15.15 **Afternoon tea**

15.15 – 16.45 **Delivering Phase 2 of the Sustainable Seas Challenge** There will be a presentation followed by a panel discussion with the Science Leadership Team.

Chair: Karen Fisher, University of Auckland

16.45 – 17.00 **Conference wrap up and poroporoaki** by Te Ātiawa

Posters, sci-art and digital tools

Monday 5 November 17.30 – 19.00 and Tuesday 6 November 12.05 – 13.30

View research posters:
During poster sessions you will be able to talk to researchers about their work and see their posters. A full list of posters will be available at the conference.

Engage through sci-art:
Visit our mini exhibition at the conference and see how scientists and artists have collaborated. The exhibition includes Gabby O'Connor's "The Unseen", "Oceans Mesh" by Vicki Smith and Charlotte Sunde, and works from Art + Oceans.

Try out some digital tools:
The Sustainable Seas Challenge is producing a range of digital tools. The conference is an opportunity for researchers to do some informal user testing and get your feedback. The tools include a website that enables users to track plastic in the ocean and an online marine management tool.

Wednesday 7 November 2018

Workshops for Sustainable Seas Challenge researchers

8.00 – 8.30 Registration

08.30 – 10.30 **Workshop Session A**

A1 Synthesis of Phase I research projects

Open to all challenge researchers. The aim of this workshop is to identify possible topics which could synthesise research across the Challenge.

10.30 – 11.00 Morning tea

11.00 – 13.00 **Workshop Session B**

B1 Using social media to communicate your research

This workshop is for researchers who are new to social media or want to build their skills. It will cover how and when to use social media channels and how to use images and video.

Maximum of 20 people.

B2 Vision Mātauranga

This workshop is for researchers who want to work on ways to incorporate Mātauranga into research and research proposals.

13.00 – 13.45 Lunch

13.45 – 15.45 **Workshop Session C**

C1 Project Leaders meeting

All project leaders are expected to attend this meeting which will cover planning for the end of Phase 1, and other key information.

C2 Using social media to communicate your research (repeat of B1)

This workshop is for researchers who are new to social media or want to build their skills. It will cover how and when to use social media channels and how to choose images and video.

Maximum of 20 people.

sustainableseaschallenge.co.nz
[@Sust_SeasNZ](https://twitter.com/Sust_SeasNZ)

National
SCIENCE
Challenges

SUSTAINABLE
SEAS

Ko ngā moana
whakauka

