



*Changing with our Climate*

# The Deep South National Science Challenge

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Programme Lead, Impacts and Implications



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# The Deep South NSC

- Our mission is to enable New Zealanders to adapt, manage risk, and thrive in a changing climate.
- Five Programmes:
  - Vision Mātauranga
  - Engagement
  - Impacts and Implications
  - Earth System Modelling and Prediction
  - Processes and Observations

# Impacts and Implications

- Four Domains:
  - Māori
  - Communities
  - National Economy
  - **Infrastructure**

# Types of research relevant to infrastructure in Phase One

- Changes in climate potentially affecting infrastructure:
  - Eg. Flood risks, sea-level rise, drought, and cascading impacts
- Understanding effects on specific infrastructure:
  - Eg. Stormwater, wastewater, drinking water, irrigation water
- Developing tools for decision-making, particularly under uncertainty:
  - Eg. Dynamic Adaptive Pathways Planning, Real-Options Analysis

# Phase 2: 2020-2025

- Currently have a RfP calling for proposals across the four domains
- Research themes are:
  - Multiple impacts
  - Effective adaptation
  - Water and land
  - Economy
- Deadline for proposals is 8<sup>th</sup> November



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# Ways to engage and connect

- <https://www.deepsouthchallenge.co.nz/>

Relevant people:

- Mike Williams, Director: [mike.Williams@niwa.co.nz](mailto:mike.Williams@niwa.co.nz)
- [anita.wreford@lincoln.ac.nz](mailto:anita.wreford@lincoln.ac.nz)
- Partnerships directors, Angela Halliday and Waverley Jones
- [angela@cultivatelogic.co.nz](mailto:angela@cultivatelogic.co.nz) & [waverley.jones@cuttriss.co.nz](mailto:waverley.jones@cuttriss.co.nz)
- Water& infrastructure stakeholder-researcher zoom meeting on Monday 1.30pm (contact Angela)
- Climate data: Olaf Morgenstern [olaf.morgenstern@niwa.co.nz](mailto:olaf.morgenstern@niwa.co.nz)

# Thank you



*Supporting New Zealanders to anticipate, adapt,  
manage risk and thrive in a changing climate.*



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