



Water Challenges of Oceania: Today to 2025

Never Stand Still

Global Water Institute



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IWRA Oceania Chapter



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IWRA Oceania Chapter



Webinar



IWRA Policy Brief



Water International special issue (late 2019)



17th IWRA Water Congress in Daegu, Korea (2020)

Webinar



Inaugural IWRA Oceania Chapter Board

Webinar



Call for expressions of interest

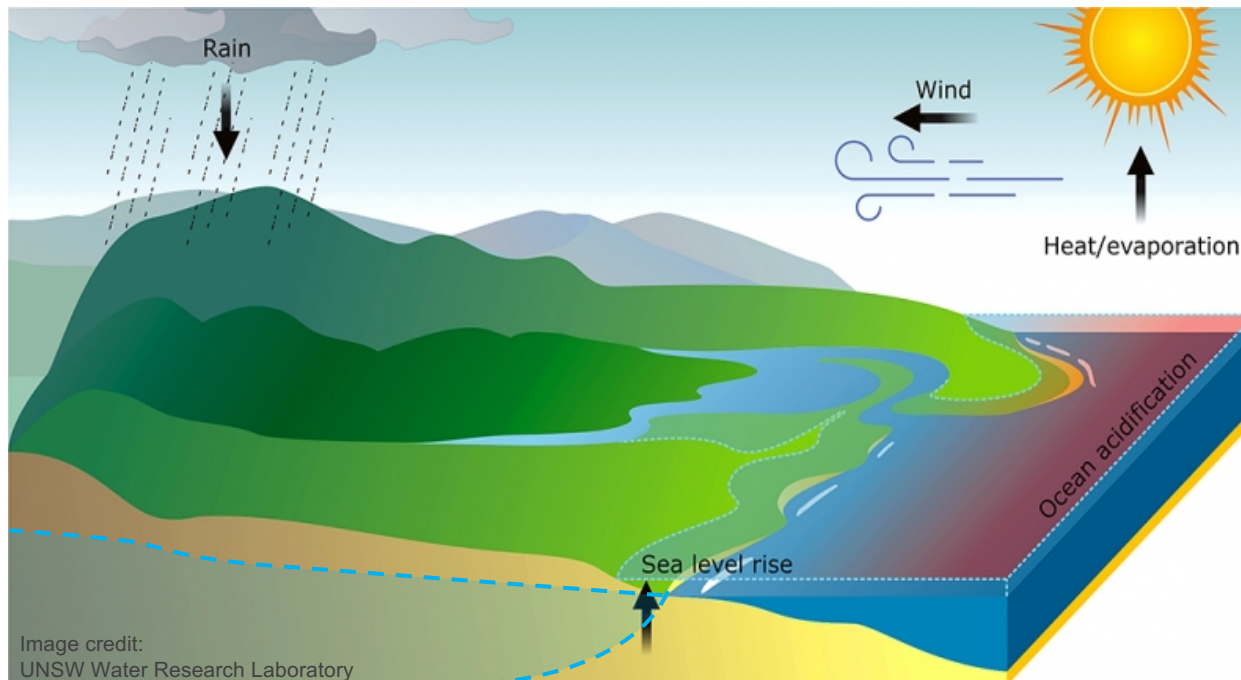


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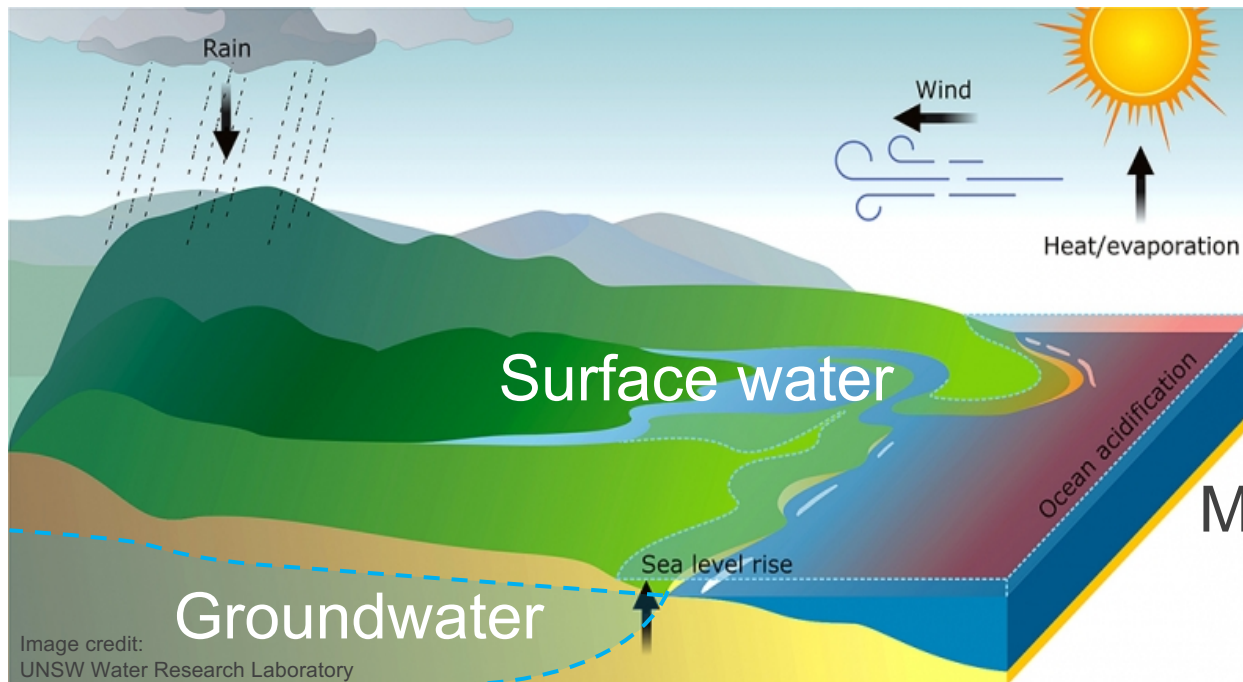
Oceania presents unique challenges and opportunities for the sustainable use of water resources and meeting the 2030 Agenda goals.

- 1) What are the most urgent water challenges in Oceania, and
- 2) What are those on the horizon that need to be prepared for?

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Marine waters

An aerial photograph of the Oceania region, including Australia, New Zealand, and the Pacific Islands. A semi-transparent teal map of the region is overlaid on the image. The title text is centered over the map.

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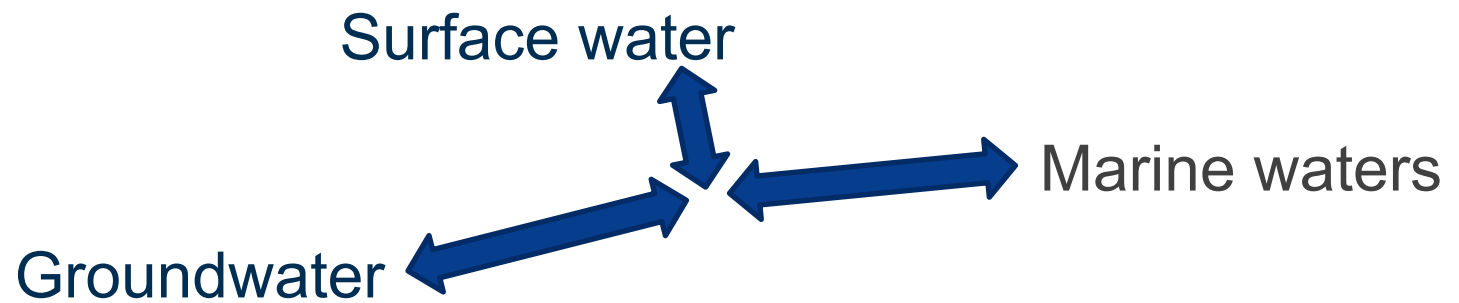
Surface water

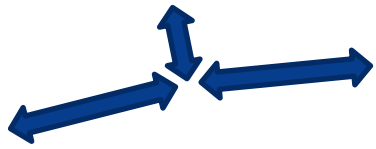
Marine waters

Groundwater

A map of Oceania, including Australia, New Zealand, and the Pacific Islands, is shown in a light blue color against a background of a blue ocean with a small boat visible on the left.

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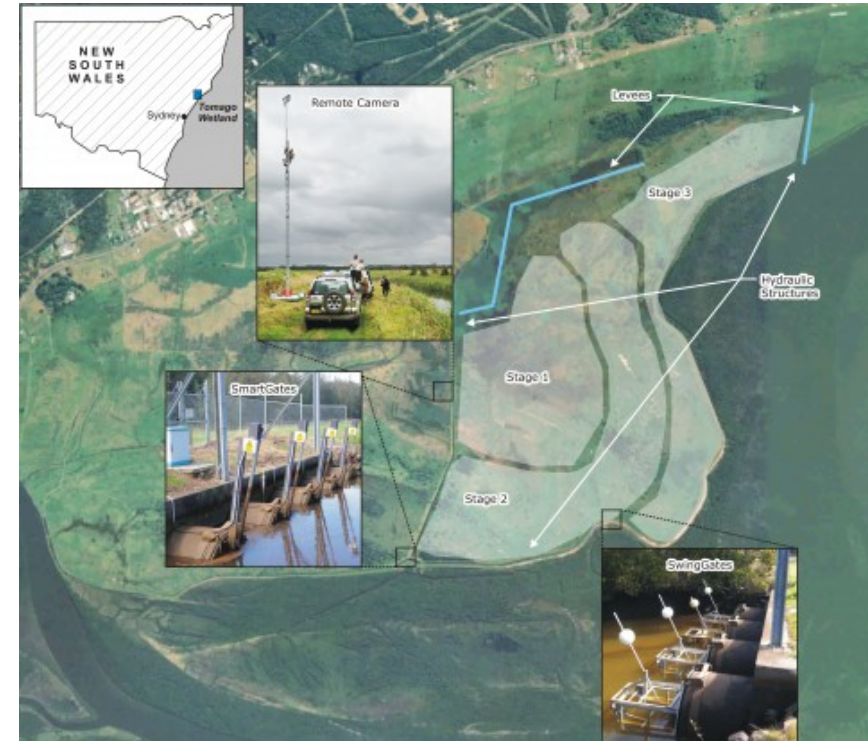


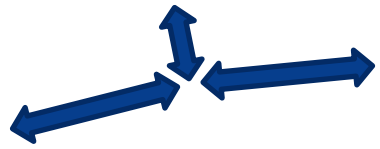
Challenges and solutions

Restoration of the tidal Tomago Wetland

Environmental sustainability was delivered by:

- Reviewing practice worldwide and developing new methods where necessary.
- Ensuring on-ground designs were engineered using techniques and products suitable for the harsh environment.
- Assigning a ranger to ensure the long-term monitoring directly links to the adaptive management of the site.
- Engineering hardware was designed to ensure easy access, high OHS standards, ease of serviceability and long lasting materials. 15 year maintenance programs were incorporated into all major infrastructure plans.





Challenges and solutions

Mei Te Vai Ki Te Vai

Mei Te Vai Ki Te Vai, or “From Water to Water” in Cook Islands Māori, is focused on improving the health of the coastal lagoons of the islands of Rarotonga and Aitutaki, through a ridge-to-reef based management process.



Project Partners



Ministry of Marine Resources
GOVERNMENT OF THE COOK ISLANDS



UNSW
SYDNEY



Slide courtesy of Matt Blacka, Water Research Laboratory

Groundwater – Surface water – Marine waters

1) What are the most urgent water challenges in Oceania?

- Sea level rise
 - Groundwater resources
 - Coastal vulnerabilities
- Increased frequency of high intensity weather events
 - WaSH infrastructure
 - Transport infrastructure
- Climate change & changes in rainfall patterns
 - Agricultural resilience
 - Environmental water needs
 - Water infrastructure



Groundwater – Surface water – Marine waters

2) What are the water challenges on the horizon that need to be prepared for?

- Sustainable management of water resources in sync with sustainable economic development.
- Building climate change adaptation capacity :
 - Human: empowered and resilient communities, industries and countries across Oceania and as a region.
 - Infrastructure: WaSH, transport, emergency response.
 - Environment: Ecosystem services to safeguard against rainfall and hydrological variations.
- Better understanding the response of groundwater resources to current and predicted future climate impacts
 - interactions between groundwater, freshwater and marine waters.



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