





# Water scarcity and water management

Escasez hídrica y gestión del agua

Chris Lijzenga (Kiwi) Isabella Ciocca (Chilean) Akuhata Bailey-Winiata (Māori/Kiwi) Andrea Eyquem (Chiwi)





## "ko wai ko au, ko au ko wai" (I am water and water is me)



Troy Brockbank (Te Rarawa, Ngati Hine, Ngapuhi) - Water Engineer







Juan Tralcal Lleuful (Mapuche) - Geologist "My father mentioned that if water gets sick, we get sick too because we cohabitate in a spiritual life spectrum, the Küme Mongen. If the water is healthy, we are going to be healthy too"

# Indigenous perspectives from Aotearoa NZ and Chile







Indigenous world views are holistic, cyclical and interrelated with nature Water is valued as kin rather than a commodity / resource Water is the giver of life and a tohu (sign) for the health of the environment



Water shouldn't be managed. Let water flow and nature will prosper

## Water Management



## Public good — Economic good



higher nitrate levels and other contaminants in waterways



> 80% water rights on private hands Pay for consumption

**Privatized water** markets

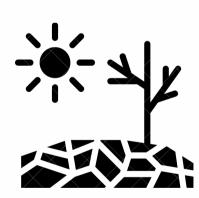
> 25 state entities > 3.000 Water Users Organizations

Many water basins overexploited, over-granted or water being stolen

Water conflicts

Industry getting a huge proportion of the water rights

# Effects of climate change



## Extreme weather events

Some reigons forecast to have more droughts, others forecast for more flooding

Driving algae-blooms, changes to marine ecosystems

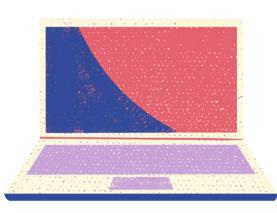
# Warming water temperatres

# The opportunity



# Next steps for our group







Initial release

Publishing on the Asia-Pacific Insights platform Translation and publishing Finding new and creative formats for the story to live in a Chilean publication on







HOME / WHĂRANGI KĂINGA TOPICS / KAUPAPA ABOUT / MÔ TÊNEI PAETUKUTUKU Q



e must change how we manage water urgently, say a team of young leaders from Chile and Aotearoa, who united under the CAPE Winds of Change programme to explore indigenous solutions to water problems.

- . The climate crisis is worsening the inequity of our water management so we have to change how we manage water urgently.
- · Indigenous groups across both Chile and New Zealand have always had sustainability at the bedrock of their worldview and practices.
- Chile and NZ both need to change and adapt their water management and climate change mitigation strategies, and both can draw on this indigenous experience.

## Fixing our water crisis — the role of indigenous knowledge

## A comparison between New Zealand and Chile, by Isabella Ciocca, Akuhata Bailey-Winiata, Andrea Eyquem and Chris Lijzenga

- experience.

## Water Scarci Water Mana 08.DEC.2021.12 MIN READ

### Winds of Change

Winds of Change unites New Zealand and Chilean postgraduate students to explore common climate change issues and sustainable development strategies.

### RECENT POSTS

Working Towards our Sustainable and Equitable Future in the Asia-Pacific



26.0CT.2021

Asia-Pacific Trade: Research Briefing

12.0CT.2021



 The climate crisis is worsening the inequity of our water management so we have to change how we manage water urgently.

· Indigenous groups across both Chile and New Zealand have always had sustainability at the bedrock of their worldview and practices.

· Chile and NZ both need to change and adapt their water management and climate change mitigation strategies, and both can draw on this indigenous





