

Remote Indigenous communities, climate change & water security: Future projections & options

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*With Sandy Bore bush food growers,
John Little and Lorraine St Clair,
Luritja Country, NT*

**WATER
&
WASH** 2023
FUTURES

Achieving SDG6 in a Changing Climate



#WaWF23

Acknowledgement of Country

We acknowledge the Traditional Owners and their custodianship of the lands on which we meet today.

We would like to pay our respects to their ancestors and their descendants, who continue cultural and spiritual connections to Country.

We recognise their valuable contributions to Australian and global society.



A Guidance in Time created by Quandamooka artists Casey Coolwell and Kyra Mancktelow

Voices from Country:

Central Desert women talk about their health, their housing and their Country
(NATISWA & UQ, 2020)

*“We don’t have a proper water supply out here...
We access drinking water from a rainwater tank. In a drought,
we have to buy 10 litre water cartons from town.
We use bore water for washing clothes and for showers. It’s
salty water straight from the ground.*

“The Government doesn’t listen to us...”

- resident, Williams Well homeland,
NT, 2020



The project was undertaken to document Aboriginal women's experiences of remote living, and their views on how housing and crowding affects the health of their families.



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Locations

The video was filmed on Arrente country in Central Northern Territory, in the outstations of Black Tank and Williams Well.

Creators

The film was devised, developed and filmed by Wendy Anders, an Arrente woman, and Sandra Creamer, a Waanyi and Kalkadoon woman, who are from the National Aboriginal and Torres Strait Islander Women's Alliance (NATSIWA).

<https://youtu.be/-xnCMiO9oUM>

Today's key points:

An overview of literature & Indigenous voices with lived experience

1) Drinking water is a human right

2) Remote drinking water:

- Today
- In a climate-affected future

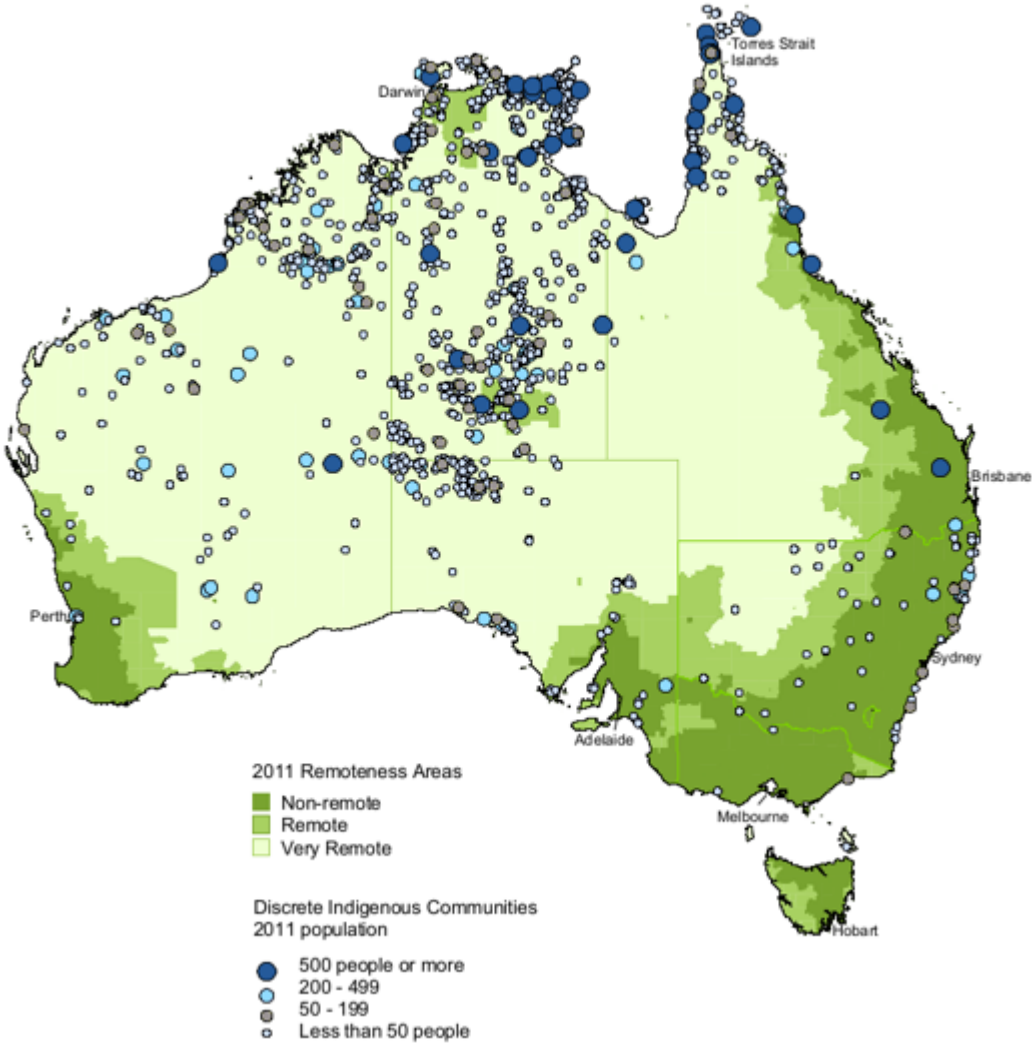
3) The way forward: tailored responses for place, people & purpose

Drinking water is a human right

- UN human right to water and sanitation (2010)
- UN Sustainable Development Goal 6 (2015): *‘ensure availability and sustainable management of water and sanitation for all’ by 2030*
- UN Declaration on the Rights of Indigenous Peoples (2007)

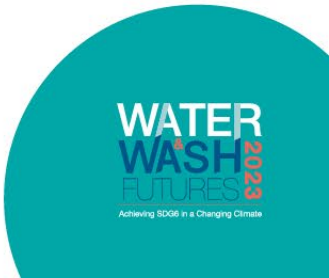
Remote drinking water: Current

Discrete Indigenous communities by size and remoteness, 2011



>1,100 remote settlements in Australia

ABS (Census of Population and Housing), unpublished, in Productivity Commission (2017), Introducing Competition and Informed User Choice in Human Services, Productivity Commission Inquiry Report no. 85, Australian Government (p.267)



Remote drinking water: Current

Tap water in > 500 remote Indigenous communities:

- not regularly tested &
- often not safe to drink.

Water supply can be contaminated:

- Microbially- *Naegleria*, *E. coli*
- Chemically - unacceptable levels of uranium, arsenic, fluoride, nitrates & more

Remote drinking water: Current

Reasons for insecure water supply:

- **Physical:** contamination (microbial, chemical, heat, saline intrusion)
- **Technical:** water operators working remotely can be unsupported, limited resources, mismatched training
- **Financial:** insufficient funding
- **Social and governance:** cultural water needs, management approaches

Moggridge, Beal, Lansbury & Agnew (2022), Countless reports show water is undrinkable in many Indigenous communities. Why has nothing changed?, November 16, <https://theconversation.com/countless-reports-show-water-is-undrinkable-in-many-indigenous-communities-why-has-nothing-changed-194447>

Remote drinking water: With climate change

Central Australia:

‘Under a high emission scenario, the ... number of very hot days (> 40 °C) will increase from approximately:

- 7 to 43 days per year in Katherine,
- 14 to 48 days per year in Alice Springs’

<https://www.climatechangeinaustralia.gov.au/en/changing-climate/state-climate-statements/northern-territory/>

Torres Strait Islands

Drought conditions: already affecting the security of water supply.

Changes to bird migration; roosting on water storages

Saltwater intrusion to freshwater wells

Cyclone-proofing: to become more intense.

N. L. Hall, H. Grodecki, G. Jackson, C. Go Sam, B. Milligan, B. Blake, et al. (2021), Drinking water delivery in the outer Torres Strait Islands: A case study addressing sustainable water issues in remote Indigenous communities, Australasian Journal of Water Resources, DOI: 10.1080/13241583.2021.1932280.

Remote drinking water: With climate change

Water (in)security:

*'The **uncertainty** in the extent to which the future climate will be **drier** and include more frequent **extreme events**, and the potential for significant changes in how water is used in Australia, point to the need for robust water planning and management processes to ensure **systems can adapt** effectively as baselines shift with climate change'*



Drinking water futures

Note:

Tailored community responses through community profiles

Technology is not necessarily the solution

Instead, fit for people, place & purpose

5 enabling aspects:

1. People factors: support, training, cultural competence
2. Cross-agency collaboration: regulators, funders, state & local government
3. Technologies that are fit for place, purpose & local people
4. Funding that is sufficient and sustainable
5. Taking a systems view of water and sanitation

N. L. Hall, A. Lee, W. Hoy and S. Creamer (2021), Five enablers to deliver safe water and effective sewage treatment to remote Indigenous communities in Australia, Rural and Remote Health 2021 Vol. 21 Issue 2

Drinking water futures: Positive change

Outer Torres Strait islands, Qld:

Local water operator, Patrick Pearson, monitoring drinking water quality through the 'Safe & Healthy Drinking Water' collaborative initiative on Kirriri/Hammond Island, Torres Strait

(Photo: Nina Lansbury, 2017)



Sandy Bore outstation, Luritja Country, NT:

Traditional Owner, Lorraine St Clair, displays mungkarta (native peach/quandong) and kamperapa (bush tomato) from her family horticulture initiative on Country

(Photos: Sandra Creamer & Nina Lansbury, 2020)



Closing words: Lived experience

The water is quite hard ... people don't want to drink it because it doesn't taste very good, so then they start substituting it for other things like soft drink or cordial or something like that ... you do find, when you travel out bush, all the whitefellas are drinking bottled water

- Representative #2, Indigenous organisation

cited in Hall, N., Barbosa, M. C., Currie, D., Dean, A.J., Head, B., Hill, P. S., Naylor, S., Reid, S., Selvey, L. and Willis, J. (2017). *Water, sanitation and hygiene in remote Indigenous Australian communities: a scan of priorities*. Global Change Institute discussion paper: water for equity and wellbeing series. 2207-9602. Global Change Institute, The University of Queensland, Brisbane.

That's why we're fighting for this water. It's not only for us, it's for them too [...] For our old people who fought before us and our kids' future.

- Alyawarre Elders, Jackie Mahoney and Pam Corbett, from Alpururulam community, NT

cited in WSAA (2022), Closing the Water for People and Communities Gap (<https://www.wsaa.asn.au/publication/closing-water-people-and-communities-gap-review-management-drinking-water-supplies>)

Thank you & please get in touch!

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UQ School of Public Health:

Working together to improve the health of populations in a changing and inequitable world



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