

### Climate Impacts: The link between water and health

#### Dr Aparna Lal

**Research School of Population Health** 



### The relationship between water and health is a shared value



#### Water filters in 2021







# The relationship between water and health is a shared vulnerability



#### "Progress on Goal 6 is alarmingly off track"

#### **6 CLEAN WATER AND SANITATION**



2.2 billion people around the world still lack clean drinking water

## Climate change will derail this further



### **Clean water access is not equal**



'A female Aboriginal elder on one of the communities said to me ...

'How can we wash hands when we don't have hand basins that work and we don't have showers that work and we don't have the infrastructure?' .... You can have all these great programs and all these great ads on TV, but if you don't have the basic infrastructure enabling those people to wash their hands, then all you're doing is just basically offending them' (Indigenous organisation #1).

Hall, N.L., 2019. Challenges of WASH in remote Australian Indigenous communities. *Journal of Water, Sanitation and Hygiene for Development*, *9*(3), pp.429-437.



## High disease burden due to unclean water in remote communities



#### Floods can amplify health risks

National

This was published 8 years ago

Day 0 in Brisbane following the 2013 floods

## Drenched Brisbane faces drinking water crisis

By Nick Ralston January 30, 2013 — 3.00am



#### 

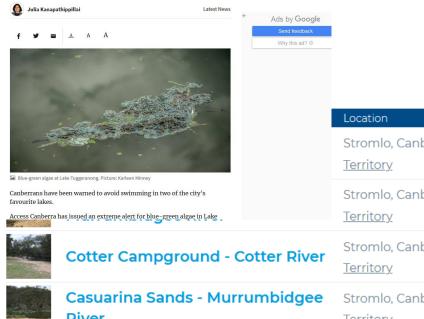
THE devastation caused by ex-cyclone Oswald in Queensland and northern New South Wales will continue for days, with thousands of homes inundated, entire communities isolated and the possibility that Brisbane could run out of drinking water.



#### Floods can amplify health risks



Extreme blue-green algae alert for Lake Tuggeranong, Lake Burley Griffin



#### Floods can result in high levels of bacteria and other pathogens being flushed

#### SEE ALL

Ise at Lake Tusseranong. Picture: Karleen Minney	Location	Water Quality
	Stromlo, Canberra, <u>Australian Capital</u> <u>Territory</u>	Current Status
Igare a Case Toggenaring, Franker sames samings have been warned to avoid swimming in two of the city's ses. erra has issued an extreme alert for blue-green algae in Lake	Stromlo, Canberra, <u>Australian Capital</u> <u>Territory</u>	Current Status
Cotter Campground - Cotter River	Stromlo, Canberra, <u>Australian Capital</u> <u>Territory</u>	Current Status
Casuarina Sands - Murrumbidgee River	Stromlo, Canberra, <u>Australian Capital</u> <u>Territory</u>	Current Status



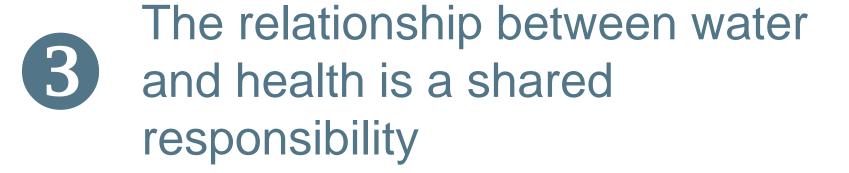
#### Floods after fires can esidents of bushfire-ravaged Bega impact drinking alley rely on carted water after water looding WINEWS Vater is being trucked to several NSW south co nobile treatment plant is filtering water at the lust In Coronavirus Watch Live Politics World Business Queensland and NSW drinking water hit by floods and fire but authorities say most areas are safe Posted Fri 14 Feb 2020 at 5:10am, updated Fri 14 Feb 2020 at 4:04pm



Over 50% of all boil water notices for drinking water issued in New South Wales between 2013 and 2020 were recorded in 2020 following the fires









### Hydropanels

## Portable water filtration

#### New hydropanel technology providing water for remote communities

by Cecilia Harris - 25/05/2020 in Innovation



#### Unloading the hydropanels. (Image: Central Desert Regional Council)

#### 2 min read

In a bid to address water supply challenges in remote Australian communities, a trial of novel 'hydropanel' technology is set to launch in Yuelamu, 300 km north-west of Alice Springs.

The hydropanels use solar power to collect water vapour from the air, which is mineralised by adding





#### Closing thoughts...

To develop systems that are resilient and sustainable in the long term, health as *defined by the impacted communities* need to be at the heart of our solutions



#### Thank you

