

Yuwaya Ngarra -li Briefing Paper:

Walgett's Drinking Water

2023



Executive summary

Ensuring safe drinking water in Walgett has been a long-term priority for the Dharriwaa Elders Group (DEG) and the Walgett Aboriginal Medical Service (WAMS). Their work has raised awareness of systematic water mismanagement which, exacerbated by both drought and flood, has rendered surface water supplies unreliable and produced high levels of water insecurity for Walgett residents. As a result, Walgett's long term drinking water security relies on regular and prolonged extraction of groundwater from the Great Artesian Basin (GAB).

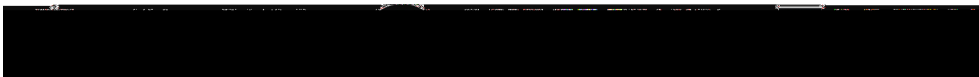
By engaging external experts, DEG and WAMS have been able to provide evidence that consumption of local groundwater containing high concentrations of sodium on an ongoing basis is unhealthy, especially in communities managing chronic conditions such as hypertension and kidney disease. The advocacy of the DEG and WAMS since 2018, including around the installation of a Reverse Osmosis (RO) facility to reduce the concentration of sodium, has been directed at finding a long-term supply of safe drinking water for all residents of Walgett and the nearby Namoi and Gingie villages. However, Walgett continues to experience water insecurity and quality issues and associated health risks.

This Briefing Paper documents a timeline of events in Walgett's recent history of drinking water management. It sets out the context in which drinking water is accessed, the associated risks, and the story of community advocacy pivotal to change. Its purpose is to inform efforts to improve water security and quality for residents in Walgett and the nearby Namoi and Gingie Villages, including the following urgent actions called for by DEG and WAMS¹:

- x Desalination solutions for towns relying on groundwater and evaporating rivers
- x Potable water supplied to Aboriginal communities
- x Fluoridation of potable water supplies
- x Accessible safe public drinking water sources
- x Australian Drinking Water Guidelines that include a health guideline for sodium rather than just referring to 'palatability'
- x Drinking water community education campaigns conducted by Aboriginal community controlled organisations (ACCOs) supported by quality community education resources.
- x Wastewater recycling and other water efficiency measures and infrastructure for remote Aboriginal communities
- x Greater engineering capacity in Walgett and regional and remote communities to enable the functioning of critical community water infrastructure

¹ Dharriwaa Elders Group & Walgett Aboriginal Medical Service (2019) "[Issues paper – Water Quality](#)", September.

- x Declaration of a climate emergency and requirements made of local governments for Climate Resilience Plans which incorporate measures for managing (or) v(h)-12(c)-8.12 (e)]TJa (g)-12.emen antnceh

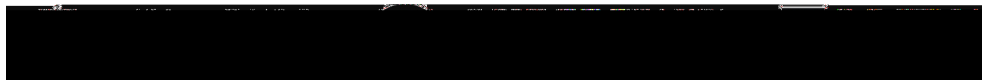


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Context

Access to safe² drinking water continues to be a challenge for residents in Walgett, creating an ongoing health risk. The co8 (kq.04 T7.8 (f)6.9-12.3 (et)3.2 (nau079 3 (ge f)2.3 (e 2.3 (al).3 (et)m2 (na4w)-2.8 9 (l)3 (e a



available information on the exact details surrounding this, but what is certain is that Walgett continues to experience water insecurity and quality issues and associated health risks.

This document seeks to outline the story of community advocacy that was successful in delivering a RO facility to Walgett, and the available details of the installation and current status of the RO system. It also aims to build understanding around why, despite large capital investment, there has been little progress in tackling Walgett's access to safe drinking water, and what can be done to address that.

Walgett's drinking water sources

The Walgett Shire Council operates both a raw water and a drinking water supply. The raw water system comes from the Barwon River Intake, and the raw water that is taken for Walgett's drinking water supply is sourced from the Namoi River.

- x Town water :
 - River : Raw water for Walgett's drinking water supply system is sourced from the Namoi River, one of the Murray-Darling Basin's major NSW sub-catchments (WSC, 2020). Water quality in the Namoi is often affected by industrial farming practices and the presence of blue-green algae (WSC, 2020). To maintain safe standards, it must be treated.
 - o Filtered – passing through Walgett's Water Treatment Plant (WTP)
 - o Unfiltered – when operational of technical capacity is lost, a separate distribution system is used to pump raw water to residents ([see A.1](#))
 - Bore : The second raw water source for Walgett comes from the Great Artesian Basin Bores. These have high Total Dissolved Solids (TDS) and sodium.
 - o Filtered – passing through Walgett's WTP
 - o Unfiltered – when operational of technical capacity is lost, it will bypass Walgett's WTP ([see A.1](#))

on their houses in Walgett some time later. Within the community these water filtration devices are considered an unreliable technology, often out of use or only supplying a few litres per day.

- x Bottled water : with increasing water insecurity, residents are forced to rely on expensive bottled water from the supermarket, an increased financial burden. If the supermarket experiences shortages, residents rely on the charitable donations of bottled water.

Health and DPIE prefer Council to continue using bore water source “until other actions identified in the risk assessment are implemented” (WSC p.20, 2020).

Namoi Village’s water source

Namoi Village is supplied both potable and raw water from the Walgett water supply systems (WSC, 2020). Treated water is supplied to a bulk meter connecting to Namoi Village’s drinking water supply and transferred via the rising mains and reticulation systems and raw water is delivered to the village via a separate bulk meter and pipe networks (WSC, 2020). At Namoi, WSC is responsible up to the meter at the boundary, and what happens inside Namoi Village is, as per a contract under the NSW Aboriginal Communities Water and Sewage Program (ACWSP), the responsibility of the WSC with NSW DPIE and NSW Health.

WSC is responsible for supplying water to the bulk meter, while the internal reticulation is the responsibility of the Local Aboriginal Land Council (LALC) (WSC, 2020) and maintained by the parties to the NSW ACWSP. In 2011 the NSW Government Office of Water developed a Water & Sewerage Management Plan for Namoi, and as Namoi Village’s water system is an extension of the town’s the water quality issues for Namoi are the same as for Walgett (WSC, 2020).

Gingie Village’s water source

Currently, Gingie is provided with untreated bore water drawn from a different GAB bore (WSC, 2020). We believe that the WSC manage the water and sewerage infrastructure at Gingie Village with NSW DPIE and NSW Health as per a contract under the NSW Aboriginal Communities Water and Sewage Program (ACWSP). WSC is the service provider under this agreement.

Water monitoring

The water supplies of Walgett town and Namoi Village, and the separate supply of Gingie Village is monitored under the ACWSP and the NSW Health Drinking Water Monitoring Program 2005 which is required to be



time . Further work needs to be made to distinguish between acute risks (poor filtration/disinfection) and chronic risks (long term exposure). While unsafe water poses health risks, aesthetically poor water can also build mistrust within the community, impacting in the long-term confidence in the water supply. For general understanding some drinking water risks are briefly presented below.

DEG and WAMS have been raising awareness around the threats to safe drinking water. These include:

- Sodium content has been the primary focus of DEG and WAMS advocacy for safer drinking water. Professor Jacqui Webster of the George Institute for Global Health and Director of the [World Health Organization Collaborating Centre on Population Salt Reduction](#) has been key to documenting the health impact Walgett's high sodium bore water presents to residents.⁶
- Fluoridation: Walgett's water supply is not fluoridated.

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Costs of RO project

The exact costs of the RO facility are not easily accessible. [The National Party website](#) states “the NSW Nationals in Government have given the North-Westerly towns of Brewarrina, Bourke and Walgett \$10 million to install mobile desalination plants”. A NSW government report on the Barwon-Darling drought reported “\$8.25 million for the Walgett Weir and Fishway project and \$1 million for an additional bore and a temporary Reverse Osmosis Plant at Walgett” (DPIE, p.4 2021). While the Walgett Shire Council’s 2019-2020 annual report mentions “installation of a reverse osmosis plant at Walgett” under “snapshot of significant achievements”, it does not mention related costs in its budget (WSC, 2020).

DEG and WAMS advocacy and the current situation

Advocacy by DEG and WAMS has been crucial in raising awareness of the health impacts of the drinking water in Walgett. Their actions contributed to the government’s decision to finance the multi-million dollar facility designed to produce safe drinking water for the town. That the RO facility is out of operation is of great concern to DEG and WAMS. They endeavour to determine what is needed to make it function effectively and are aware that in the meantime Walgett’s residents continue to face high levels of water insecurity and associated health risks.

The timeline in the next section of this Briefing Paper documents significant events in Walgett’s drinking water management, including the statements released by DEG/WAMS and the Walgett Shire Council, as well as related media coverage.

- 19 December 2018 : DEG and WAMS meet with NSW Health, NSW DPI Water and Walgett Shire Council asking them for a response to the high sodium levels in the drinking water, RO and drinking water kiosk solutions

2019

- 4 January 2019: Town water filtration pump fails, water pressure dropped, some houses had no water and raw water supply was turned off affecting use of evaporative airconditioners in over 40 degree heat
- 4 January 2019: "Walgett loses all water, some air conditioning as heatwave pushes temperatures near 40 degrees", [ABC News – Lucy Thackray](#)

- 20th January 2019: Community first hear of a commitment to RO facility via [article](#) in The Daily Telegraph.
- 22 January 2019: “ Walgett's water crisis: NSW considers options after 'concerning' sodium levels found”, [The Guardian Australia – Lorena Allam](#)
- 22 January 2019: “ For centuries the rivers sustained Aboriginal culture. Now they are dry, elders despair”, [The Guardian Australia – Lorena Allam and Carly Earl](#)
- 23 January 2019: “ Water crisis: western NSW mayors travel to Sydney to demand help”, [The Guardian Australia – Anne Davies](#)
- 25 January 2019: “ When the river runs dry: the Australian towns facing heatwave and drought”, [The Guardian Australia – Anne Davies, Lorena Allam, Carly Earl and Mike Bowers](#)
- 5 February 2019: “ NSW Government vows clean drinking water for Menindee residents after fish

- 6 June 2019: “ After drought took its water, a town's only supermarket burns down”, [NITV News – Douglas Smith](#)
- 8 June 2019: “ No green nature strips in town: regional NSW braced for tougher water restrictions”, [The Guardian Australia – Lisa Martin](#)
- 26 June 2019: [New report documents a community-led response to a health crisis in Walgett, NSW – Croakey Health Media](#)
- 15 July 2019: “ Water quality and availability concerns in drought for dialysis patients”, [ABC News – Lucy Thackray](#)
- 22 July 2019: Commitment made by Deputy Premier John Barilaro to ABC News to install a reverse osmosis desalination plant for the towns water supply.
- 22 July 2019: “Saltwater solution for drought towns battling brackish drinking water”, [ABC News – Rachel Carbonell](#)
- 30 July 2019: “ Drought towns feeling the impact from their backup water supply”, [NITV News – Brooke Fryer](#)
- 30 July 2019: “ NBA star supplies struggling community with clean drinking water”, [NITV News – Brooke Fryer](#)
- 6 August 2019: “ Walgett water supply”, [Cate Faehrmann NSW Greens MP](#)
- 11 September 2019: “ Community faces latest challenge in gaining access to clean drinking water”, [NITV News – Brooke Fryer](#)
- 14 September 2019: “ 'I don't know how we come back from this': Australia's big dry sucks life from once-proud towns”, [The Guardian Australia – Anne Davies, Ben Smee, Lorena Allam](#)
- 24 September 2019: “ NSW secretly exploring long-dismissed plan to turn coastal rivers inland”, [The Guardian Australia – Anne Davies](#)
- 31 August 2019: Boil Alert, “due to a technical issue there is high turbidity in the town water supply”. In a September Guardian Australia [article](#) Walgett Shire’s general manager Greg Ingham is quoted as saying the “only real long-term solution is rain”. Local Mayor Ian Woodcock referred to Walgett’s high sodium water is “better than nothing”.
- 16 September 2019: WAMS [issues paper](#) on the water quality situation, prepared by DEG, questioning the capacity and decision-making of WSC.

- 13 August 2020 : Wendy Spencer and Christine Corby [give evidence](#) to the House of Representatives Inquiry into Food Pricing and Food Security in Remote Indigenous Communities. Details the entangled nature of food and water security.
- 24 August 2020 Christine Corby OAM attends the Productivity Commission's National Water Reform 2020 Inquiry Access to Water Roundtable from NACCHO's invitation, with briefing notes prepared by DEG's YN Water and Country project.
- 25 August 2020 Christine Corby OAM attends the Productivity Commission's National Water Reform 2020 Inquiry Household Water Services Roundtable from NACCHO's invitation, with briefing notes prepared by DEG's YN Water and Country project.
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2022

- 28 February 2022: Submission to New South Wales Parliament’s Legislative Assembly Committee on Environment and Planning titled “inquiry into food production and supply in NSW”, again reinforcing the inseparable nature of food and water security.
- 3 March 2022: Floodplain Harvesting [report](#): “An unsustainable level of take: on-farm storages and floodplain water harvesting in the northern Murray–Darling Basin, Australia” (Brown et al., 2022)
- 22 May 2022: [Statement](#) released by DEG detailing their water management policy. Covers climate change, the need for a review of the National Water Initiative, ownership and trade of water, water for Aboriginal people, protection of the environment, and maldistribution.

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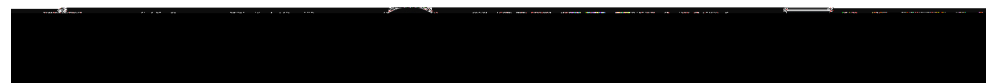
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