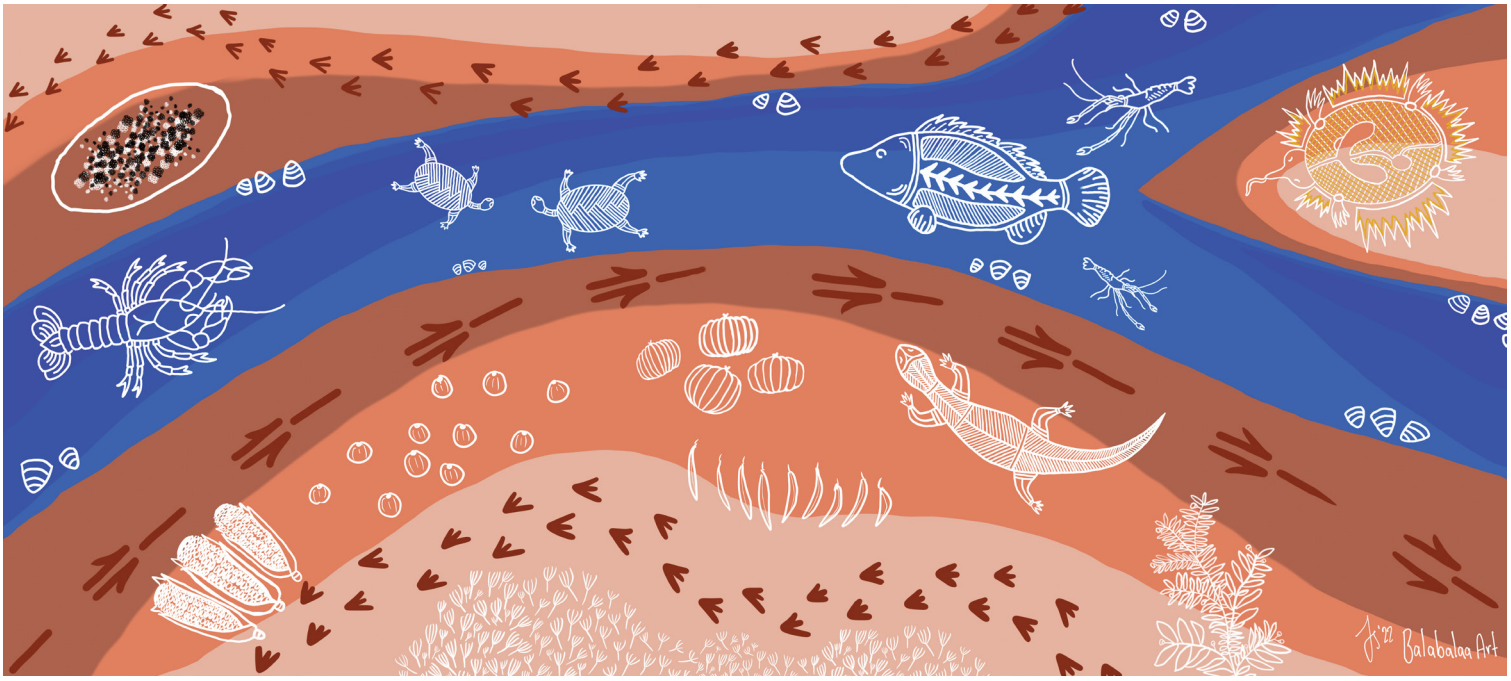


Yuwaya Ngarra-li Community Briefing Report:

Key Findings from the Food and Water Security Surveys in Walgett

February 2023

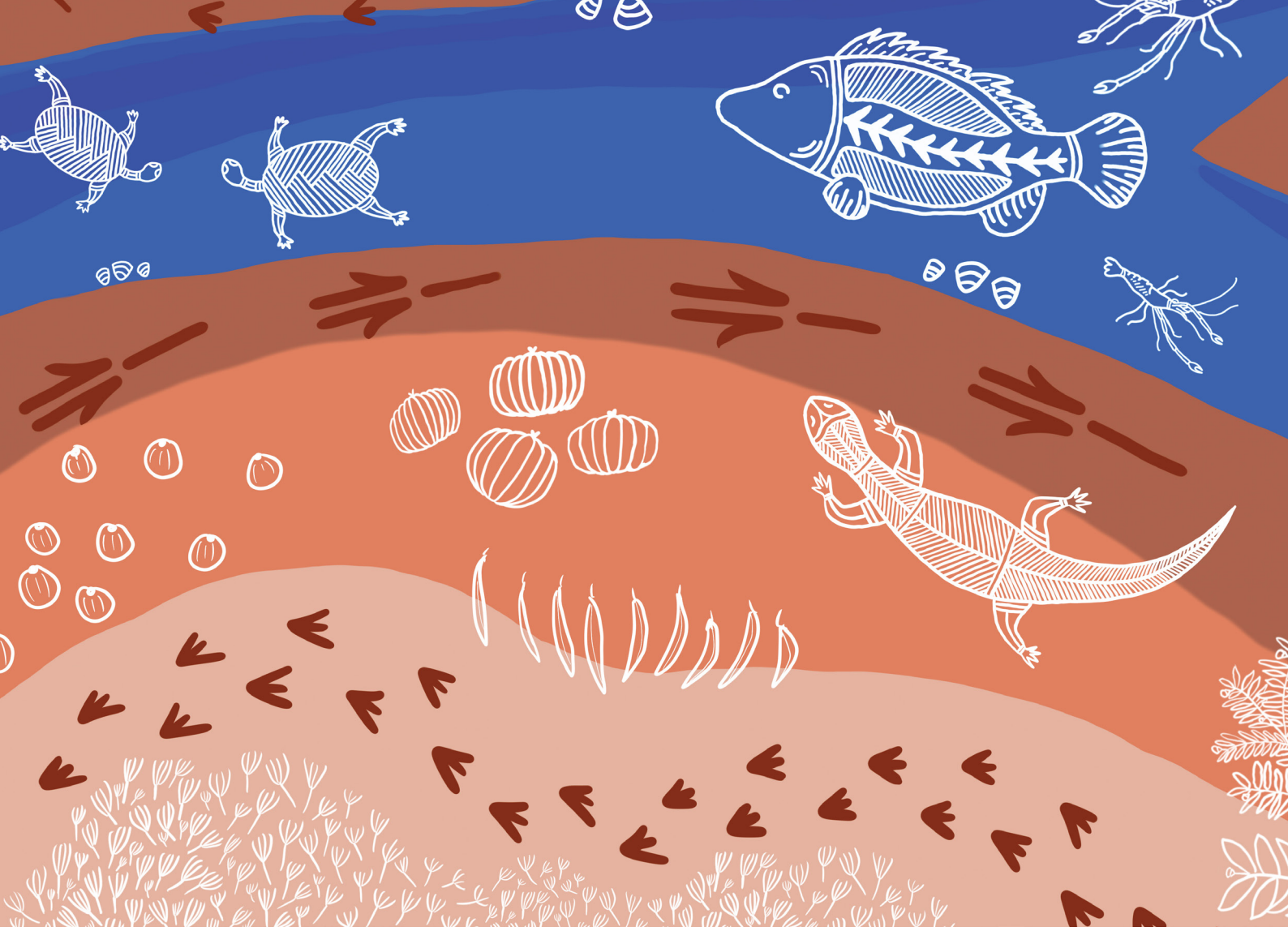
DHARRIWAA ELDERS GROUP

WALGETT ABORIGINAL MEDICAL SERVICE LIMITED

COMMUNITY-LED DEVELOPMENT

UNSW SYDNEY
Global Water Institute

The George Institute for Global Health



Artwork credit: Joanne Stanford

Report: This report was produced under the Yuwaya Ngarra-li 'vision' partnership between UNSW, the Dharriwaa Elders Group (DEG) and Walgett Aboriginal Medical Service (WAMS), in collaboration with The George Institute for Global Health.

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Walgett Aboriginal Medical Service and Dharriwaa Elders Group are based in Walgett on the traditional Country of the Gamilaraay people, and we acknowledge the leadership and custodianship of Gamilaraay, Ngayiimbaa, Wayilwan and Yuwaalaraay Elders, past and present.

The George Institute for Global Health and UNSW are based in Sydney on the traditional Country of the Gadigal People of the Eora Nation, and the Wurunjuri People of the Kulin Nation, and the authors pay respect to their Elders past, present and emerging.

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Summary

46%

Almost half (46%) of the Walgett Aboriginal community members surveyed reported experiencing food insecurity (HFIAS ≥9) - this is much higher than the prevalence rates reported in previous national surveys for Australia.

44%

Almost half (44%) of the Walgett Aboriginal community surveyed reported experiencing water insecurity (HWISE score ≥12) and water insecurity was experienced more severely (based on the mean HWISE score) in Walgett than in some communities in low- and middle-income countries (e.g., Bangladesh and Lebanon).

91%

of those surveyed said they were worried about water quality at some time in the last year and 60% reported that they were worried about water quality in most months in the last year.

SODIUM/LITRE (mg)
300

Previous reports on water quality revealed that the sodium content was around 300mg sodium/Litre – this is almost twice the accepted levels for palatability in the Australian government's drinking water guidelines and around 15 times the levels recommended for people with hypertension.

30%

of people surveyed experienced food and water insecurity. Participants that experienced water insecurity were more likely to experience food insecurity.

UP TO
$50

Some respondents reported spending $30-50 dollars per week on bottled water, which made it challenging to afford healthy food.

Food and Water Insecurity are common and interconnected:

Walgett Food and Water for Life

Food and water security is a **MAJOR CONCERN** for the Walgett community. The Dharriwaa Elders Group and the Walgett Aboriginal Medical Service (WAMS) have been working to improve access to fresh food and safe drinking water in Walgett for many years.

In 2022, 250 Aboriginal people in Walgett were interviewed about their experiences of food and water security.

OVERALL FINDINGS

Community members reported many problems with food and water, including experiencing not having enough to eat or drink, and/or going to sleep hungry or thirsty at night.

46% OF THE COMMUNITY EXPERIENCED FOOD INSECURITY.

This is much higher than prevalence rates reported in previous national surveys and similar to First Nations communities in Canada and many developing countries.

44% OF THE COMMUNITY EXPERIENCED WATER INSECURITY.

This is similar to First Nations communities in Canada and worse than some communities in Bangladesh and Lebanon.

FOOD SECURITY

Many of community members struggled with:

71%
AFFORDABILITY
(not enough money)

63%
AVAILABILITY
(no food at the markets)

47%
ACCESSIBILITY
(couldn't get to the shops)

24%
SAFETY
(food not safe/could not be prepared safely)

>50% When people were food insecure, they relied on extended family to provide food or money for food, fish or seafood from the river, and donated grocery boxes (>50%).

WATER SECURITY

The majority struggled with:

84%
experienced interruption of their main water source at least once in the last 12 months

91%
were concerned about water quality at some time in the year

68%
experienced anger about the water situation in the last 12 months

4 in 5
Due to main water disruptions and concerns about the quality, 4 in 5 community members had to rely on purchased or donated bottled water in the last year.

30-50
Some people reporting spending $30-$50 on bottled water each week. This made it difficult to afford a healthy diet.

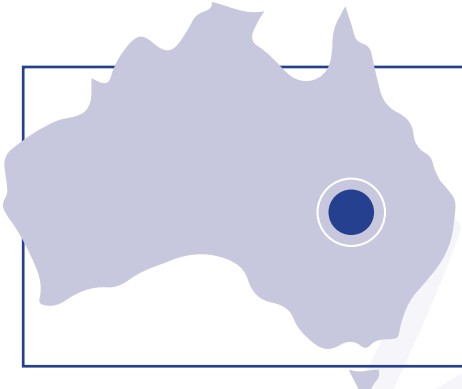
Introduction

The Food and Water for Life program is led by Dharriwaa Elders Group (DEG) and Walgett Aboriginal Medical Service (WAMS) through DEG's Yuwaya Ngarra-li partnership with UNSW and The George Institute for Global Health. It grew from responses to findings from Walgett's Food Forum in April 2019 where community members discussed their concerns about food and water security, including disruptions to food and water supplies, as a result of the long-term drying of the rivers at Walgett, and high food prices in remote areas. More recent COVID-19 panic buying and the burning down of the Walgett Independent Grocers' Association (IGA) meant the community had to drive to the next town (80km away) or rely on food and water donations.

The Food and Water for life program recognises that when Aboriginal people are connected to Country, including food and water systems, this contributes to social, emotional, cultural, spiritual and physical health and wellbeing[1]. Addressing issues of food and water security leads to improved nutrition and decreased risk of chronic disease[23].The project aims to enable community-led sustainable food and water initiatives and ensure healthy drinking water and fresh nutritious food produced locally to continue to improve food and water security for years to come.

In 2020, DEG and WAMS were part of a collaboration led by the George Institute for Global Health (TGI) that was successful in obtaining National Health and Medical Research Council IDEAS funding to strengthen food and water security initiatives in Walgett, including by employing local Aboriginal people and collecting data to inform, strengthen and evaluate the program.

One of the first steps has been to better understand experiences of food and water security in Walgett through community surveys. WAMS, DEG and Aboriginal researchers led the design and implementation of the surveys with support from the George Institute for Global Health and have been closely involved in the data analysis and writing of reports.



This report highlights the key findings of the survey which will be used to further inform and strengthen the ongoing community-led efforts to improve food and water security of **Aboriginal people in Walgett.**

The community surveys

The community surveys took place in April 2022. Ethical approval for the research was obtained from the Aboriginal Health and Medical Research Council (AHMRC; 1781/20) and the University of New South Wales (UNSW).

A team of local community members from WAMS and DEG was established and trained to collect the data. With permission from the local IGA (Independent Grocers Association), we invited people entering or leaving the supermarket to participate in the surveys. The research team asked Aboriginal people, aged 18 or over, living in Walgett, questions about food security and water security. Those who consented took part in the surveys in WAMS tents outside the IGA or in DEG offices across the road. People who completed the surveys were provided with a $25 voucher for each survey, which could be used in local shops (e.g., IGA, butchers, newsagents).

The questions were from the Household Food Insecurity Access Index Scale (HFIAS) and the Household Water Security Index Scale (HWISE) which are widely used around the world[45]. Questions ranged from 'Did you ever worry about not having enough food/water to meet your needs?' to 'Did you ever have to go to bed hungry/thirsty?'[5]. A scale was then applied to get an overall score for food and water insecurity so that the findings could be compared with other communities and globally [46].

Who completed the survey?

There was an excellent response from the local community who were keen to participate in the surveys. The survey was taken by 251 people over two weeks. This included similar numbers of men and women of different age groups broadly reflecting the profile of the Aboriginal population in Walgett. About 80% of the participants were from Walgett town with the remainder from nearby villages of Gingie or Namoi or out of town. One in five (20%) of respondents lived alone or with a partner whilst the rest of those people surveyed lived in houses of 2-8 people. The women surveyed were much more likely to be responsible for shopping and cooking than the men and most households ate together.

WHAT DID PEOPLE TELL US?

"It is cheaper to drink soft drink than bottled water" (Female, 28y)

"Go and buy takeaway because it's cheaper" (Female, 37y)

"It is sometimes hard to get fruit and veg and sometimes they are squashed or damaged" (Female, 61y)

"We might as well not have a wash because then you smell like the water does" (Female, 59y)

"Prices of food and fresh food are too expensive, especially for low-income families in a small community like Walgett" (Female,23y)

"Cant wash clothes as water smells" (Male, 72y)

"Fruit and veg that goes off very quick" (Female, 49y)

"Can't buy most things [we] would like to eat" (Female, 44y)

"Plants and lawn have died" (Female, 61y)

"Buy takeaway as [we] can't prepare food with water" (Male, 72y)

Descriptions of town water:

"It's brown and dirty" (Male, 31y)

"Horrid smell" (Female, 61y)

"Tastes disgusting" (Female, 53y)

Food security

Almost half (46%) of the Walgett Aboriginal community members surveyed reported experiencing food insecurity (HFIAS ≥9). This is much higher than the prevalence rates reported in previous national surveys for Australia, which is 22% for Aboriginal and Torres Strait Islander peoples and less than 4% in the non-Indigenous population[7]. This is similar to some First Nations communities in Canada[8].

Around two-thirds of the people surveyed said they experienced food insecurity due to affordability (not enough money or food too expensive) and availability (no food on shelves due to depleted stocks/disrupted supply chains). Not having the required utilities (e.g., power) or equipment (e.g., fridge, oven) were also experienced but less frequently.

The three most common food insecurity indicators experienced by participants were worrying about not having enough food (67%), not being able to eat preferred foods (65%) and eating a limited variety of foods (62%).

Almost one-third of participants experienced having no food to eat (29%) and going to sleep hungry (28%) and with more than one in five (22%) going a whole day and night without eating in at least one month in the last year.

Almost everyone (95%) reported that they get food from the local supermarket (IGA). Additionally, around half reported that they also use other local shops (52%) and the local river (44%). Some said they also get food from native vegetation/bush tucker (22%), the WAMS community garden (30%), and other community sources such as the PCYC or schools (6%).

When people experienced food insecurity, they primarily relied on extended family to provide food or money for food, fish or yabbies (crayfish) from the river, and donated grocery boxes (>50%).

> *Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.*
>
> **(World Food Summit, 1996)**

Dharriwaa Elders Group Speaker Clem Dodd at the launch of the drought proof Walgett Aboriginal Medical Service (WAMS) community garden, December 2020.

OVERALL FINDINGS

Community members reported many problems with food and water, including experiencing not having enough to eat or drink, and/or going to sleep hungry or thirsty at night.

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WATER SECURITY

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experienced interruption of their main water source at least once in the last 12 months

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68%

experienced anger about the water situation in the last 12 months

4 in 5

Due to main water disruptions and concerns about the quality, 4 in 5 community members had to rely on purchased or donated bottled water in the last year.

30-50

Some people reporting spending $30-$50 on bottled water each week. This made it difficult to afford a healthy diet.

Water insecurity

In terms of water insecurity, the picture was similar. Almost half (44%) of the Walgett Aboriginal community surveyed reported experiencing water insecurity (HWISE score ≥12). This figure is much higher than the national average of the general population based on a recent Gallup survey using the same survey tool (1%). These prevalence rates are similar to other First Nations communities in Canada[9]. Based on the mean HWISE score, water insecurity was experienced more severely in Walgett than in some communities in low- and middle-income countries (e.g., Bangladesh and Lebanon)[10].

Two-fifths of participants experienced no usable or drinkable water (42%) and going to sleep thirsty (36%) in at least one month in the last year.

Around 10% of the participants reported having to change what they ate because of the quality of the water, having to go to sleep thirsty because of no usable water and having the household's main water supply interrupted in most months in the last year.

The three most common water insecurity indicators experienced by participants were feeling angry about the water situation (68%), worrying about not having enough water (67%), and having the household's main water supply interrupted or limited (66%).

Around a third of people reported having no usable water (at all or of an acceptable quality to drink) in one or more months in the last year.

More than a half of the survey participants reported not having enough water to drink, having to change what they ate or having to change food preparation practices because of not having enough water or because of water quality in at least one month in the last year.

4 in 5 Walgett residents surveyed relied on town water as a main source of water. Of these 84% reported having to rely on purchased or donated bottled water due to water interruptions in at least one month in the last year. More than half relied on bottled or boxed water in most months in the last year.

Nine out of ten respondents (91%) reported being concerned about water quality in at least one month, and 60% reported being concerned most months of the year. People living outside of Walgett town (mainly in the nearby Gingie Village) were much more likely to use tank water or hydro-panels as their main source of water.

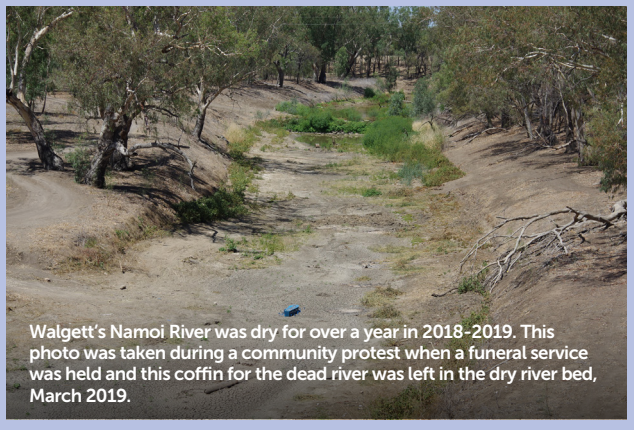
Household water security is the ability to access and benefit from adequate (ie, appropriate quantities of water for all household uses), reliable and safe water for well-being and a healthy life. It considers the multiple components of water at the level at which they are experienced (i.e., by individuals and households).

(Young SL, BMJ, 2019)

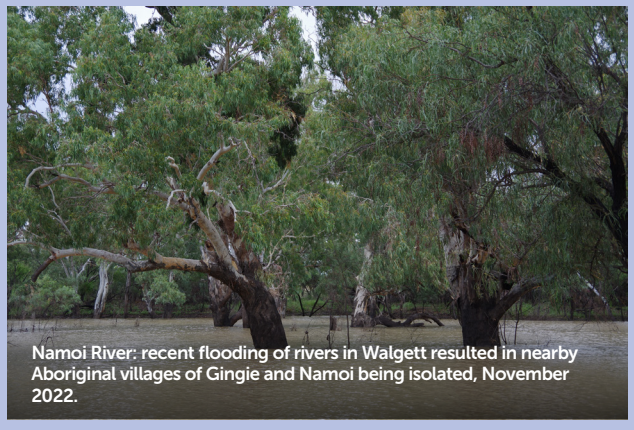
"Well I used to always say that if we had a healthy river, we would have healthy people. It makes life a hell of a lot easier.

When I was a youngster we would go fishing and that was how we survived when the men were put off at the stations and there had no work. It was a hard slog but we managed."

Quote from participant, "Ageing Well in Walgett" study



Walgett's Namoi River was dry for over a year in 2018-2019. This photo was taken during a community protest when a funeral service was held and this coffin for the dead river was left in the dry river bed, March 2019.



Namoi River: recent flooding of rivers in Walgett resulted in nearby Aboriginal villages of Gingie and Namoi being isolated, November 2022.

FOOD SECURITY

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(not enough money)

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AVAILABILITY
(no food at the markets)

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ACCESSIBILITY
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>50% When people were food insecure, they relied on extended family to provide food or money for food, fish or seafood from the river, and donated grocery boxes (>50%).

Food and water security are interconnected

Privileging the Aboriginal paradigm on the interconnectedness of food and water systems has enabled us to demonstrate the association between water and food insecurity and better understand the nuances of how they are related. Almost a third (30%) of the participants were experiencing both food and water insecurity. Participants that experienced water insecurity were more likely to experience food insecurity, such that the HFIAS score increased by 0.43 (95% CI 0.35 to 0.52; p<0.001) per unit increase in the HWISE score. Some respondents reported spending $30-50 dollars per week on bottled water, which made it challenging to afford healthy foods. Many people said they no longer relied on fish or yabbies from the river meaning they needed to spend more money on food. Some people said that they didn't trust the quality of the water to prepare food for their children meaning they had to rely on more expensive ready-made foods.

How will these findings be used?

The findings of the survey will help the Food and Water for Life project team to better support community-led efforts to improve food and water security of Aboriginal people in Walgett including:

ADVOCACY ACTIONS:

Advocating for government to:

- Work more closely with communities and support community responses to tackle food and water security.
- Make sure water security is addressed as part of national programs to improve food security and diet.
- Establish a multi-agency taskforce to improve drinking water in Walgett, with representation from relevant local, state and national agencies, as well as experts and local community-controlled organisations. This task force should:
  - be led by an independent expert endorsed by Walgett Aboriginal Community Controlled Organisations.
  - produce practical actions and outcomes to tackle Walgett's water security and quality issues to improve the health of Walgett's rivers, including addressing problems of overextraction of water from rivers via flood plain harvesting.

COMMUNITY ACTIONS

Strengthening the existing program of community-led food and water security activities in Walgett, including through:

- Obtaining additional funds to support expansion and co-ordination including setting up a dedicated Food and Water Hub.
- Establishing and maintaining community drinking water kiosks.
- Resourcing a regular community food service (e.g. food trailer or dinners outside DEG) to serve healthy fresh meals.
- Expanding the Walgett Aboriginal Medical Service's community garden and outreach work to be able to provide more people with fresh locally grown fruit and vegetables.
- Continuing to work with the Walgett IGA to improve access to healthy affordable foods.
- Raising awareness of the importance of water filters and maintenance for rainwater tanks.
- Advocating for the NSW Government to resource Walgett Shire Council to complete the installation of a fit for purpose reverse osmosis system to reduce sodium in the drinking water.

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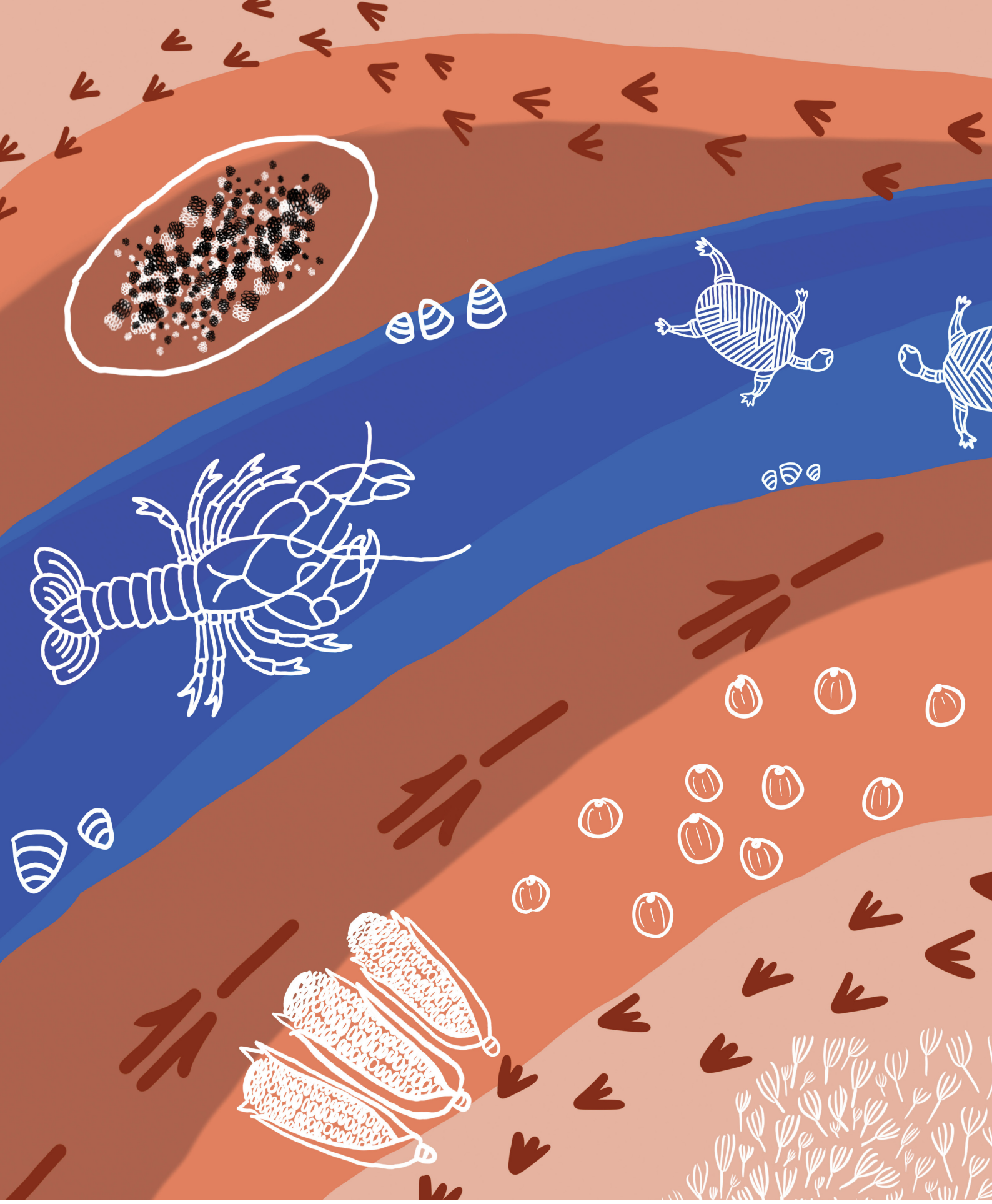

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