October 2025 remediation and monitoring update

Blamey Barracks (Kapooka Military Area)

KEY POINTS

- **Defence completed investigations into per- and poly-fluoroalkyl substances (PFAS) contamination on and around Blamey Barracks in 2021.**
- **Four PFAS source areas were found requiring further investigation or action.**
- **In 2021, Defence developed a PFAS Management Area Plan outlining the proposed management actions.**
- **In 2021, Defence started ongoing monitoring.**
- **A PFAS movement study, a hydrology study and a remediation investigation have been completed.**
- **Management of PFAS in soil at the fire station is being planned as part of the Riverina Redevelopment Project.**
- **Overall, the latest ongoing monitoring results do not suggest a change in potential exposure risks.**
- **All plans and reports are published on the Defence website.**

What are PFAS?

PFAS are manufactured chemicals that have been used in Australia and globally in many common household products and specialty applications.

Legacy firefighting foams containing PFAS have historically been used worldwide by both civilian and military authorities because they are effective in fighting liquid fuel fires.

The movement of PFAS from source areas into the environment has become a concern because these chemicals can persist in humans, animals and the environment.

Background

In June 2021, Defence completed investigations to better understand PFAS contamination on and around Blamey Barracks, resulting from historical use of firefighting foams on the site.

This included a detailed investigation of groundwater, surface water and sediment on and around the site. A human health and ecological risk assessment was also completed. The investigations found that PFAS are mostly concentrated in areas where firefighting foams were previously used, stored or disposed of. These are commonly referred to as source areas.

Defence found four key source areas requiring further investigation or action including:

- the fire station
- two former fire training areas
- wastewater irrigation areas

The investigation findings were used to develop a PFAS Management Area Plan. The management plan sets out Defence's activities to manage the risks from PFAS contamination on and around the base. Defence continues to work collaboratively with the NSW Environment Protection Authority and Wagga Wagga City Council to manage PFAS impacts.

Remediation and management activities

Remediation means managing contamination to reduce exposure risks.

Since 2021, Defence has undertaken further investigations to plan for remediation. This has included a PFAS movement study to measure how PFAS moves from the site during rain events and a hydrology study to better understand flooding conditions at the Barracks and San Isidore.

Further soil and surface water investigations were also undertaken to better understand the significance of each PFAS source area.

The studies confirmed that the fire station is a primary source of PFAS contributing to PFAS moving in surface water from the Barracks. It also confirmed the fire training areas and the wastewater irrigation area are less significant sources of PFAS leaving Blamey Barracks and do not require further management.

Management of PFAS in soil at the fire station will be undertaken as part of the Riverina Redevelopment Program.

During infrastructure works taking place in 2024, Defence removed 1,230 tonnes of stockpiled soil impacted by PFAS leftover from the Enhanced Land Force program from 2007-2009. The soil was disposed of at licenced facilities in Wetherill Park, Kurnell, and Gregadoo.

Precautionary advice

The Human Health Risk Assessment for Blamey Barracks identified a potential elevated exposure risk from the consumption of fish from dams along Kapooka Creek and consumption of home-reared lamb (where sheep are watered from dams).

The NSW EPA has provided precautionary advice to specific properties with a potentially elevated exposure risk.

More information is available on the NSW EPA website, www.epa.nsw.gov.au/Your-environment/Contaminated-land/PFAS-investigation-program/pfas-investigation-sites/Kapooka-Blamey-Barracks

Revised Australian Drinking Water Guidelines

The National Health and Medical Research Council (NHMRC) released revised Australian Drinking Water Guidelines for some PFAS in June 2025. These guidelines indicate the amount of PFAS in drinking water that a person can safely consume, without an unacceptable risk to health.

The revised guidelines include lower values for perfluorooctane sulfonic acid (PFOS), perfluorooctanoic acid (PFOA) and perfluorohexane sulfonic acid (PFHxS), and introduce a new guideline value for perfluorobutane sulfonic acid (PFBS).

The guidelines are very conservative to reflect Australia's conditions and context. NHMRC advised that even though the new guideline values for PFAS are lower than before, there is no immediate health risk if you continue to drink water at the previous guideline values.

Defence has modified analysis methods to be able to compare monitoring results to the new lower guideline values. This will inform Defence risk management and communication.

Riverina Redevelopment Program

The Riverina Redevelopment Program is progressing with planning and approvals to complete upgrades to facilities at Blamey Barracks. The upgrades will manage PFAS in soil at the fire station area and improve stormwater management at the site to improve capacity and reduce flooding impacts.

Defence completed a Kapooka Creek Flood Study to identify potential flood behavior in Kapooka Creek from on base infrastructure, and to provide input to drainage and management options as part of the redevelopment works. The study found that while Blamey Barracks contributes to flood flows in Kapooka Creek, there is a significant catchment upstream of Defence land that is a major contributor to flood flow. The study indicates that flooding in the entire Kapooka Creek catchment would be not be impacted by the Riverina Redevelopment Program works.

Artistic impressions recruit welfare facilities at Blamey Barracks

Ongoing Monitoring

The Ongoing Monitoring Plan outlines what Defence is sampling (e.g. soil, water, sediment), where the sampling will take place, and how often.

This ensures Defence maintains an up-to-date understanding of any risk that the community may be exposed to from PFAS coming from the base. This understanding helps us work out the best way to minimise that risk.

Ongoing monitoring at Blamey Barracks and within the management area occurs approximately every February and September. The monitoring plan is reviewed regularly and Defence updates the monitoring frequency and/or locations of sampling as required in consultation with the NSW Environment Protection Authority.

October 2023 – March 2025 Ongoing Monitoring Report

The Ongoing Monitoring Report collates and interprets PFAS sampling results from the Ongoing Monitoring Plan. The latest report also compares the results of the new sampling data to past data collected since October 2023.

The Ongoing Monitoring Report is available on the Defence website, www.defence.gov.au/about/locations-property/pfas/pfas-management-sites/blamey

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PFAS INVESTIGATION AND MANAGEMENT PROGRAM

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Number of samples collected and analysed between October 2023 - March 2025

Groundwater	Surface water	Sediment.
		
Groundwater is water beneath the earth's surface. It often supplies bores, wells or springs.	Surface water is water that collects on the ground and can be in the form of creeks, rivers or wetlands.	Sediment is broken down remains of rocks, minerals, plants, and animals that have moved and deposited to a new location.
22 samples collected from 9 groundwater monitoring locations.	**38 samples collected from 15 surface water monitoring locations.**	**31 samples collected from 11 sediment monitoring locations.**

What does the Ongoing Monitoring Report tell us?

Based on the samples collected, the levels of PFAS contamination in surface water, groundwater and sediment were consistent with previous results.

An increasing trend was observed in a dam on a private property on Kapooka Creek. The concentrations remain low and do not change health risks identified in the Human Health Risk Assessment Defence will continue to monitor this location to identify if any action needs to be taken.

To help maintain an understanding of the community's water use, Defence will soon ask residents to complete new water use surveys to confirm current water uses.

Next steps

Over the next 12 months Defence will:

- continue monitoring on and around Blamey Barracks to further understand any changes in PFAS concentrations, with the latest sampling round just completed in September 2025. Defence is currently analysing the results and will share the findings with the community when available. The next sampling round is scheduled for February / March 2026.
- continue to keep the community informed about the management and ongoing monitoring of PFAS on and around Blamey Barracks
- prepare the report on the remediation investigation completed in September 2025
- ask specific residents to complete a new water use survey
- continue the planning and approvals to commence the Riverina Redevelopment Program at Blamey Barracks, Kapooka.

Looking for more information?

Scan the QR code to find out more about Defence's PFAS Investigation and Management program at Blamey Barracks or visit: www.defence.gov.au/about/locations-property/pfas/pfas-management-sites/blamey-barracks-kapooka-military-area

Alternatively, you can contact:

1800 333 362

pfas.enquiry@defence.gov.au

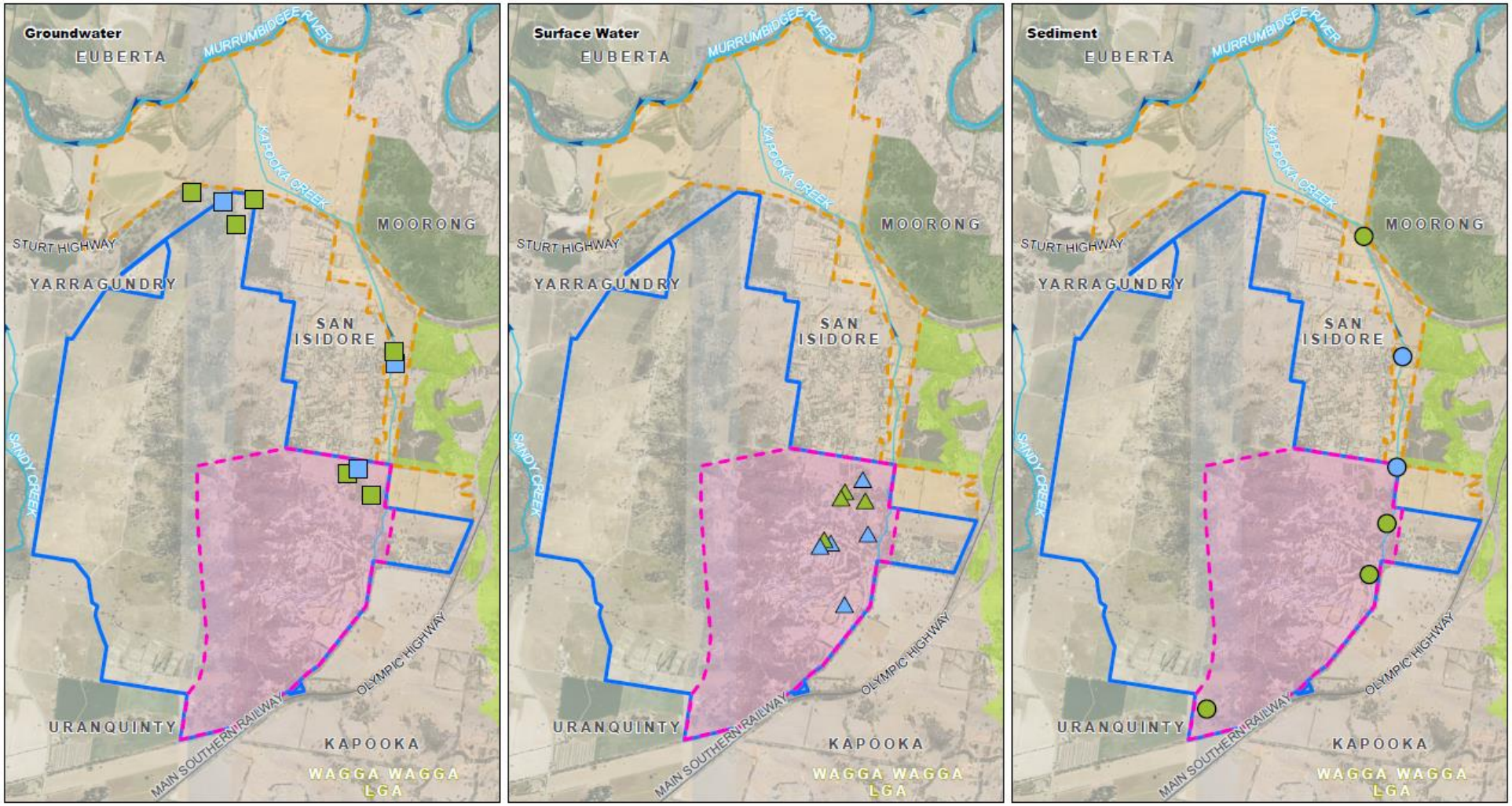
Health enquiries

Health related enquiries should be directed to the Department of Health, Disability and Ageing on 1800 941 180 or email: health.pfas@health.gov.au

Translating and Interpreting Service (TIS National)

For translation assistance, TIS National provides interpreting services 24 hours a day via telephone anywhere in Australia. For more information contact 131 450 or visit: www.tisnational.gov.au

All website links and contact details in this factsheet were correct at the time of publishing, but may change over time. For the most up-to-date information, please refer to www.defence.gov.au/pfas



Legend

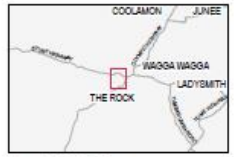
- Site Boundary
- On-Base Management Area
- Off-Base Management Area

Groundwater sample result
- Non-Detect
- Above Detection Limit

Surface water sample result
- Non-Detect
- Above Detection Limit

Sediment sample result
- Non-Detect
- Above Detection Limit

- Parks and recreation
- Environmental protection
- Watercourse
- Railway



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GDA2020 MGA Zone 55
Data sources: Jacobs 2025, DCS 2025
Basemap: Metromaps, ESRI Imagery 2025

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Blamey Barracks Kapooka, Ongoing Monitoring results – March 2025