October 2025 remediation and monitoring update

RAAF Base Wagga

KEY POINTS

- **In 2018, Defence completed investigations into per- and poly-fluoroalkyl substances (PFAS) contamination on and around RAAF Base Wagga.**
- **In 2019, Defence developed a PFAS Management Area Plan of proposed remediation and management actions to address risk.**
- **In 2020, Defence started ongoing monitoring.**
- **In 2023, Defence detected low levels of PFAS at two monitoring wells in east Wagga Wagga. These monitoring wells are not part of Riverina Water's drinking water supply bore network.**
- **Defence expanded the monitoring network in east Wagga in 2023 and 2024 to increase the understanding of PFAS contamination in the area.**
- **Defence is working with the NSW Government, Riverina Water County Council and the Wagga Wagga City Council to safeguard Wagga Wagga's drinking water supply.**

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 November 2018, Defence completed investigations to better understand PFAS contamination on and around RAAF Base Wagga, resulting from historical use of firefighting foams on the base.

This included a detailed investigation of groundwater, surface water and sediment on and around the base, and a human health and ecological risk assessment.

Defence found three key source areas on the base requiring further investigation or action including:

- the former fire training area near the airport runway
- current fire station washdown bay
- fire extinguisher training pad and former fire station area.

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 Agency (EPA), Riverina Water County Council and Wagga Wagga City Council to understand and manage the impacts of PFAS contamination from RAAF Base Wagga.

Remediation and management activities

In May 2025, Defence completed all planned remediation works at RAAF Base Wagga. This included remedial works at the current fire station and fire training pad. The remediation is expected to reduce PFAS leaving the base, and over time contribute to the reduction of PFAS in the monitoring area. More information about these works is on the following page.

Remediation means managing contamination to reduce exposure risks.

In 2021, Defence collaborated with Wagga Wagga City Council to remove approximately 1,500 tonnes of PFAS impacted soil from the Wagga Wagga Airport taxiway. The soils were transported off-base to a licenced waste facility.

Wagga Wagga Airport taxiway works

Precautionary advice

The NSW EPA has provided a small number of properties surrounding RAAF Base Wagga with tailored precautionary advice to reduce their exposure to PFAS. This advice is specific to those properties and does not apply to the wider Wagga Wagga community.

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

Revised Australian Drinking Water Guidelines

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

Soil remediation works at the former fire station and surrounds

Defence's investigations confirmed that the fire station wash down bay, fire extinguisher training pad and former fire station were the largest sources of PFAS leaving the base. Defence has remediated these source areas by removing redundant infrastructure, and replacing or repairing damaged utilities that enabled PFAS to move off the base.

Excavated soil was transported off-base to a licensed waste facility. Soil with the highest concentrations of PFAS were transported from the base to a specialised and regulated treatment facility in Victoria for thermal destruction.

The remediation works removed 1,330 tonnes of PFAS impacted soil from the area, and an additional 549 tonnes of debris containing PFAS were also removed.

Repairs to sewer and stormwater infrastructure in the area were also undertaken and are expected to reduce PFAS moving off-base. Future ongoing monitoring of the areas will help Defence understand the effectiveness of the remedial works.

Soil remediation works underway

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 leaving the base. This understanding helps Defence work out the best way to minimise that risk.

Ongoing monitoring at RAAF Base Wagga and within the monitoring area occurs around 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 EPA.

April 2024 - February 2025 Ongoing Monitoring Report

In April 2024 and February 2025, Defence undertook routine sampling of surface water and groundwater on and around RAAF Base Wagga. The April 2024 – February 2025 Ongoing Monitoring Report collates and interprets the sampling results. The report also compares new sampling data with past data collected since 2020. The report is available on the Defence website, www.defence.gov.au/about/locations-property/pfas/pfas-management-sites/raaf-base-wagga

What does the Ongoing Monitoring Report tell us?

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

The levels of PFAS contamination were highest within the Gumly Gumly Wetland and adjacent to Marshalls Creek (groundwater), and at the base boundary draining toward the Gumly Gumly Wetland (surface water).

The findings from the sampling undertaken to date do not suggest a change in potential exposure risks for the community.

East Wagga PFAS detections in groundwater

In 2023, Defence detected low levels of PFAS at two groundwater monitoring wells approximately 650m from the east Wagga borefield operated by Riverina Water. The east Wagga borefield is one of four main water sources used by Riverina Water.

In 2024, Defence installed new monitoring wells between existing routine monitoring locations and the Riverina Water east Wagga borefield to investigate PFAS within groundwater in the area. The closest monitoring wells are now 375m from the nearest borefield, adjacent to Marshalls Creek. The February 2025 results detected PFAS above the Australian Drinking Water Guidelines for PFAS within the newly installed monitoring wells. Sampling undertaken in September 2025, shows PFAS in the east Wagga supply bores remain below the drinking water guidelines and is safe to consume. Defence will continue to monitor these locations to identify if any action needs to be taken.

The results suggest Marshalls Creek is a pathway for the movement of PFAS and could be the cause for the detections in this monitoring well. Limited sampling has been undertaken of the newly installed monitoring wells and further ongoing monitoring will help improve Defence's understanding of PFAS contamination in the area.

Defence is working with Riverina Water County Council, NSW Government and Wagga Wagga City Council to help safeguard the Wagga Wagga water supply over the long-term. Regular testing will continue.

Groundwater sampling

Next steps

Over the next 12 months Defence will:

- continue monitoring 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 2026.
- continue to keep the community informed about the management and ongoing monitoring of PFAS on and around RAAF Base Wagga.
- continue to work with Riverina Water, Wagga Wagga City Council and NSW. Government agencies to manage PFAS impacts from RAAF Base Wagga.

Looking for more information?

Scan the QR code to find out more about Defence's PFAS Investigation and Management program at RAAF Base Wagga or visit, www.defence.gov.au/about/locations-property/pfas/pfas-management-sites/raaf-base-wagga

Alternatively, you can contact:

1800 333 362

pfas.enquiry@defence.gov.au

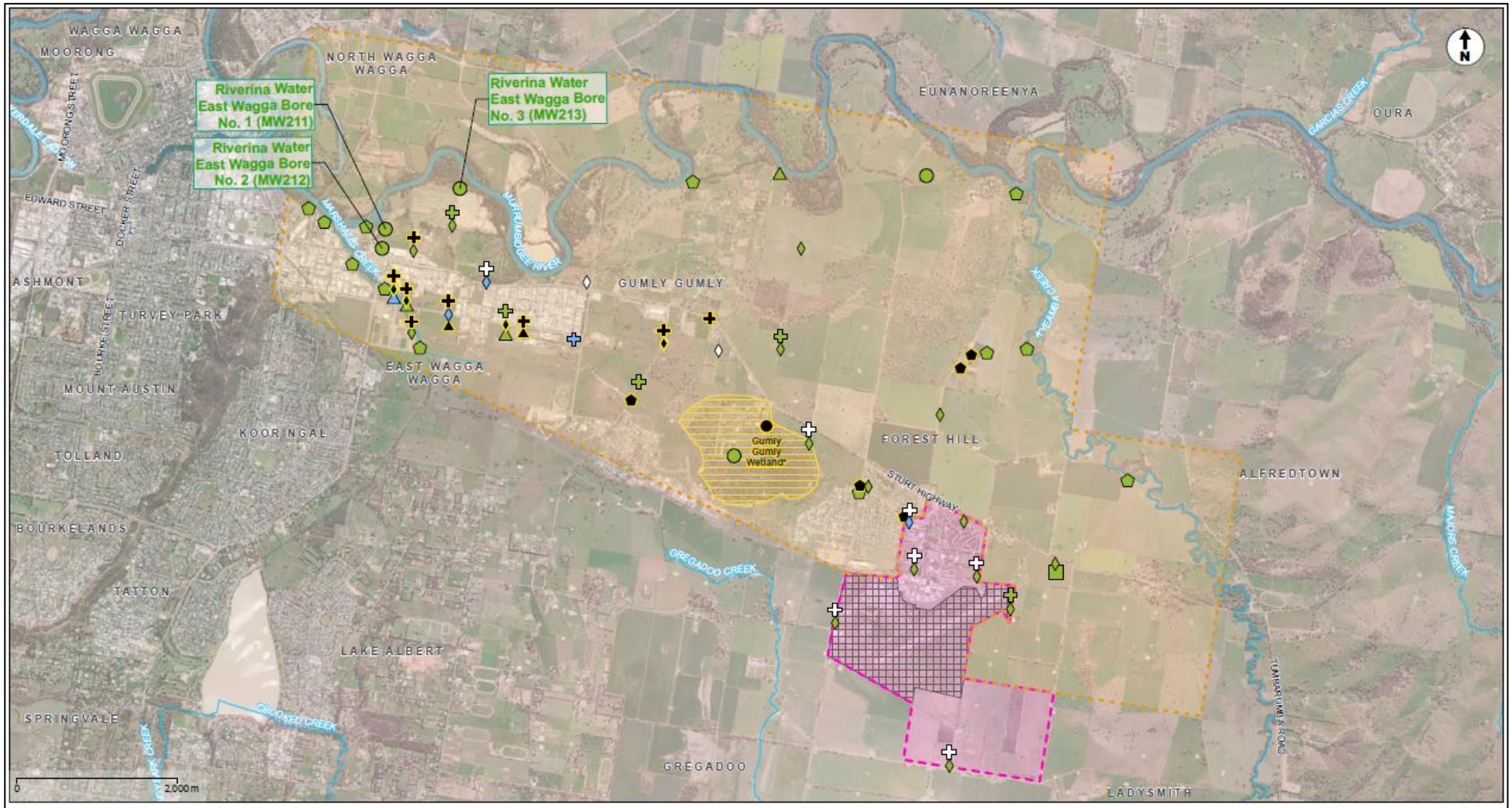
Health enquiries

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

Surface water sample result
- Non-Detect
- ≤Drinking Water Guideline
- >Drinking Water Guideline

Groundwater Cowra sample result
- Non-Detect
- ≤Drinking Water Guideline
- >Drinking Water Guideline
- Not sampled

Groundwater Upper Formation sample result
- Non-Detect
- ≤Drinking Water Guideline
- >Drinking Water Guideline
- Not sampled

Groundwater Lower Formation sample result
- Non-Detect
- ≤Drinking Water Guideline
- >Drinking Water Guideline

Wantabadgery Granite sample result
- Non-Detect

Other [1]
- Non-Detect
- ≤Drinking Water Guideline
- >Drinking Water Guideline

- On-base Management Area
- Off-base Monitoring Area
- City of Wagga Wagga Council Lease Area
- Watercourse
- Wetlands *Gumly Gumly Wetland boundary is indicative and based on imagery*

Notes
1.Wells labelled as "other" were either constructed with a gravel pack from ground surface to termination depth or construction details are unclear
2. The icons for co-located monitoring wells have been re-arranged to improve visibility and may not be shown in the pre-cise location of the monitoring well

Scale: 1:48,000 @ A4
GDA2020 MGA Zone 55
Data sources: Jacobs 2025, Department of Customer Service 2025
Basemap: Metromaps 2025

Australian Government
Defence

PFAS INVESTIGATION AND MANAGEMENT PROGRAM

SERVICE
COURAGE
RESPECT
INTEGRITY
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RAAF Base Wagga Ongoing Monitoring Results – February 2025