

**Submission  
No 12**

**INQUIRY INTO INQUIRY INTO PFAS CONTAMINATION  
IN WATERWAYS AND DRINKING WATER SUPPLIES  
THROUGHOUT NEW SOUTH WALES**

**Organisation:** Local Government NSW

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DRAFT SUBMISSION

**Inquiry into PFAS  
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throughout NSW**

November 2024



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## Introduction

Local Government NSW (LGNSW) is the peak body for local government in NSW, representing NSW general purpose councils, county councils, and related entities. LGNSW facilitates the development of an effective community-based system of local government in the state. As the peak body representing councils in NSW, we aim to support, promote, and advocate for the interests of council owned Local Water Utilities (LWUs).

NSW councils are responsible for providing water and sewerage services to more than 1.8 million people in NSW outside the areas serviced by the Sydney and Hunter Water Corporations. These services are provided by 89 council owned LWUs.

LGNSW provides support and advice to member councils on water policy and industry best practice, as well as representing the views of local government to the state and federal governments and other key stakeholders.

LGNSW welcomes the establishment of the Select Committee to inquire into and report on [PFAS \(per and polyfluoroalkyl substances\) contamination](#) in waterways and drinking water supplies throughout NSW and appreciates the opportunity to provide a submission to this inquiry.

Please note this is a draft submission awaiting review by the LGNSW Board. The Committee is asked to consider this current version. If there are any changes following Board endorsement these will be separately provided to the Committee.

## Background

There has been evolving interest in PFAS with the presence of PFAS chemicals in Australia coming under increased scrutiny. Concern further escalated during 2024 when the US Environmental Protection Agency (US EPA) introduced significantly stricter standards for PFAS exposure levels in drinking water<sup>1</sup>. PFAS chemicals are of particular concern as they do not break down easily in the environment and as such are also known as “forever chemicals”. They have also been used in a very wide range of consumer and industrial products over several decades. The use of PFAS as a fire retardant is well documented however there are many other common uses.

There are also many different types of PFAS, including:

- Perfluorooctane sulfonic acid, known as **PFOS**
- Perfluorooctanoic acid, known as **PFOA**
- Perfluorohexane sulfonic acid, known as **PFHxS**

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<sup>1</sup> Water Services Association of Australia (WSAA), [Evolving interest in PFAS | Water Services Association of Australia](#)

While concerns about PFAS contamination in drinking water are not new, studies have typically found low concentrations of these chemicals in Australian drinking water samples, with levels well below the limits specified in the [Australian Drinking Water Guidelines \(ADWG\)](#).

This inquiry will examine testing and monitoring practices for PFAS, as well as public disclosure of contamination levels. It follows of growing [media coverage](#) that highlighted gaps in widespread testing for PFAS in drinking water, including reports of contaminated levels exceeding the safety guidelines. For example, PFAS levels in a creek flowing into Medlow Dam, a Sydney Water facility in the Blue Mountains, were reported to be over 50 times the level considered safe for drinking water<sup>2</sup> under Australian standards.

Council owned LWUs face a wide range of risks to the safe operation of water supply and sewerage services. Such challenges include drought, water security and emerging contaminants like PFAS. The growing awareness of PFAS contamination highlights the need for enhanced screening and risk management practices. Addressing this issue is crucial not only for the protection of water resources but also for raising awareness of the public's understanding of this complex issue.

## LGNSW Response

In preparing this submission, LGNSW has conducted consultations with a diverse array of stakeholders, including councils and the NSW Water Directorate. The NSW Water Directorate is a partnership between LWUs and LGNSW.

Our response will address the [Terms of Reference \(Appendix A\)](#) relevant to council operations, with the primary focus on the impact on LWUs in NSW.

### The adequacy and extent of monitoring and data collection on PFAS levels in waterways and drinking water sources

Water quality is one of the primary risks that LWUs manage in providing a constant supply of safe drinking water. This includes assessing and managing the risk of PFAS in drinking water<sup>3</sup>. LWUs also conduct rigorous testing for a wide range of other pathogens, cyanobacteria, pesticides and radiological contamination.

It is noted that all water supplied as drinking water in Australia must meet the existing ADWG. Existing guidelines specify that:

- For PFOS and PFHxS, the limit is a combined total of less than 0.07 micrograms per litre (µg/L).
- For PFOA, the limit is less than 0.56 µg/L

LGNSW welcomes NSW Health's offer of support for all LWUs to conduct [initial screening](#) for PFAS as part of risk management. To date, no unsafe detections have been found in water supplies provided by LWUs and monitoring efforts are ongoing. For example, [Tweed Shire](#)

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<sup>2</sup> Sydney Morning Herald, [PFAS: Medlow Dam chemicals 50 times higher than safe level](#)

<sup>3</sup> NSW Health, [Per- and polyfluoroalkyl substances \(PFAS\)](#)



[Council's](#) testing for PFAS recently confirmed that Tweed's tap water was safe to drink, meeting requirements of the ADWG.

LGNSW continues to support a risk-based approach to water quality monitoring. However, it is also important to note that LGNSW does not receive PFAS data from LWUs. This data is shared between individual LWUs and regulatory bodies such as NSW Health and the NSW Environment Protection Authority (NSW EPA) and the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEE).

### **The adequacy of the reporting and disclosure requirements to the public of monitoring and findings on PFAS contamination of water**

LWUs are guided by the ADWG, which provides a framework for managing water quality risks, including for PFAS contamination. LGNSW notes that NSW Health has recommended and supported PFAS testing and particularly has recommended public reporting of drinking water monitoring results, including the provision of a template for sharing routine monitoring. LGNSW shares the views of the NSW Water Directorate in supporting the recommendation of NSW Health for LWUs to publicly report drinking water quality data and performance. More importantly, public education campaigns also need to be conducted to ensure the community can understand what the standards are and how to interpret this data.

The NSW DCCEE also monitors and annually reports on the overall [performance of LWUs](#) as a public 'report card' in the annual NSW Water Supply and Sewerage Performance Monitoring Report. This report provides valuable information on the performance of LWUs, offering the public insights into water quality management.

### **The identification of communities at risk from PFAS contamination**

The NSW EPA's [PFAS Investigation Program](#) is focused on identifying and investigating sites around NSW where large quantities of PFAS have been used in the past. The program targets specific locations such as airports, firefighting training facilities and industrial sites, where there may have been exposure pathways that increase the risk of contact with PFAS. For most people in PFAS affected areas, the highest risk of exposure is likely to be through the consumption of contaminated groundwater (i.e. bore water) and food grown using contaminated ground water.

LGNSW and councils support the continued efforts of the NSW EPA in investigating communities at risk from PFAS contamination. We also urge ongoing communication with the public to ensure the community is informed.

### **The adequacy and effectiveness of government engagement with and support for communities disproportionately affected by PFAS contamination, including First Nations communities**

Recently, the NSW Government has worked with local drinking providers to address the impacts of PFAS contamination at [Wagga Wagga \(Riverina Water\)](#), including expanded testing funded by NSW Health to ensure the proactive management of PFAS in the community.

Further, LGNSW understands that previously the Commonwealth Government has previously compensated First Nations communities for cultural loss and property damages resulting from PFAS contamination at defence sites NSW. An example is the Wreck Bay Aboriginal

Community Council<sup>4</sup> which was impacted by PFAS contamination.

LGNSW strongly advocates for the continued support and government engagement with Aboriginal communities, particularly through initiatives such as the [Aboriginal Communities Water and Sewerage Program](#) (ACWSP), to ensure access to safe and reliable water supply.

## Sources of exposure to PFAS, including through historic and current firefighting practices

One of the primary sources of exposure to PFAS is through their use in firefighting foams, which have been widely used for firefighting and training exercises at airports and defence force sites due to their heat resistance. However, if not managed properly, these chemicals can cause significant damage to the environment through run off into water courses and absorption into aquifers.

Since 2002, the Australian Government has worked to reduce the use of certain PFAS in firefighting foams<sup>5</sup>. [Current regulations](#) in NSW restrict the use of PFAS-based firefighting foam to essential applications only, to reduce its impact on the environment.

However, exposure to PFAS can occur through various sources, including everyday products such as:

- food packaging
- non-stick cookware
- sunscreens
- cosmetics
- clothing
- stain protection applications for fabric and carpets.

## Health, environmental, social, cultural and economic impacts of PFAS

### 1. Health:

Numerous studies have linked increased exposure to PFAS chemicals with a range of [human](#) and [environmental health problems](#). These include higher cholesterol, lower birth weights, reduced kidney function and certain cancers<sup>6</sup>. It is difficult to accurately track and measure effects of different levels of PFAS exposure on people. People may be exposed to PFAS chemicals in their everyday life through their clothes, cosmetics, cookware, packaging materials or through food and drinking water<sup>7</sup>.

There is no safe level of exposure without a risk of adverse health effects. There is currently limited understanding of the human health effects of long-term PFAS exposure. Therefore, as a precaution, governments in Australia have recommend that exposure be reduced wherever possible while research into any potential health impact continues.<sup>8</sup>

### 2. Environment:

Based on [investigations of PFAS contaminated sites](#), the ongoing use of PFAS firefighting

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<sup>4</sup> Sydney Morning Herald, [Wreck Bay PFAS: Department of Defence to pay \\$22m to settle cultural loss](#)

<sup>5</sup> Australian Government, [FAQs | Australian Government PFAS Taskforce](#)

<sup>6</sup> Department of Health and Aged Care, [Per- and Polyfluoroalkyl Substances \(PFAS\) | Australian Government Department of Health and Aged Care](#)

<sup>7</sup> The Conversation, [There are 'forever chemicals' in our drinking water. Should standards change to protect our health?](#)

<sup>8</sup> Australian Government, [FAQs | Australian Government PFAS Taskforce](#)

foam has been identified as a primary cause of PFAS contamination in the environment in NSW. The use of some firefighting foams, leaks from PFAS storage sites, and the shedding of PFAS from everyday household products or from industries to sewers, can lead to PFAS passing into environmental waters, soils and land. For example, PFAS in clothes, cooking pans and other products can pass into wastewater. Due to their persistent nature, PFAS can remain in the environment for months or even years.

In terms of planning and land use, studies have suggested that environmental risk assessments can be a useful tool to identify the risks posed by PFAS by looking at specific characteristics of a site, along with its current and future use<sup>9</sup>.

### **3. Social/Cultural:**

The widespread media coverage of PFAS contamination in water has understandably heightened public concern. There are numerous social and cultural impacts of PFAS. For example, residents in affected areas, such as those living near defence bases like Williamstown in NSW, have expressed concerns about decreased property values due to PFAS contamination. In many cases, financial institutions have refused to lend to people seeking to purchase properties in these PFAS affected areas or do not recognise equity in properties<sup>10</sup>. Furthermore, as previously mentioned, there have been cases where PFAS contamination has also impacted Aboriginal land, leading to damage to culturally significant areas.

### **4. Economic:**

A global study by ChemSec, a Swedish-based NGO, estimated the societal cost of PFAS at approximately \$17.5 trillion across the global economy<sup>11</sup>. This is a significant sum that includes the costs of government-funded pollution cleanup and healthcare expenses for individuals suffering from PFAS-related health issues.

From the perspective of LWUs, it is important to point out that LWUs did not create or benefit from PFAS contamination. It is not possible to quantify the impacts on drinking water across rural and regional NSW without further investigation and testing. However, it is clear that LWUs are not in a position to bear the full cost of responding to PFAS and will require significant support and funding if stricter standards are introduced. In areas where elevated levels of PFAS are found, costly cleanup measures will be necessary for treatment. There are [treatment techniques](#), such as activated carbon filtration, which can be used to address PFAS contamination, but upgrading such drinking water treatment systems would be financially costly for councils, which are already financially stressed.

Further, the presence of PFAS also undermines recycling and the circular economy. For example, compost made from food and garden organics may be contaminated through packaging and other sources<sup>12</sup>. Therefore, there is a clear need to remove these chemicals from packaging material, which is consistent with the [NSW Plastics: The Way Forward](#) draft paper and the drive for circular economy implementation and the [NSW Waste and Sustainable Materials Strategy](#).

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<sup>9</sup> The Possible, [PFAS Remediation On Urban Sites | The Possible](#)

<sup>10</sup> Australian Parliamentary Hearing, [4. Financial impacts – Parliament of Australia](#)

<sup>11</sup> The Guardian, [Societal cost of 'forever chemicals' about \\$17.5tn across global economy – report | PFAS | The Guardian](#)

<sup>12</sup> University of Technology, [Regulating 'forever chemicals' | University of Technology Sydney](#)



## The adequacy and effectiveness of New South Wales's legislative and regulatory framework in testing for, monitoring, mitigating and responding to PFAS contamination, including the adequacy of health-based guidance values, as compared to the standards and practices of other Australian and international jurisdictions

The *Public Health Act 2010* and the Public Health Regulation 2022 require water suppliers including LWUs to have and comply with a 'quality assurance program' or drinking water management system<sup>13</sup>. This includes procedures and reporting requirements for the safe supply of drinking water. These systems are subject to regular external reviews and audits to assess how drinking water is being managed.

LWUs generally rely on the guidance and advice of government agencies including NSW Health, NSW DCCEEW, NSW EPA and the National Health and Medical Research Council (NHMRC). The NHMRC recently announced a [review of PFAS in Australian drinking water](#), proposing stricter standards for PFAS in drinking water. This review is a precautionary measure, as the understanding of PFAS and its health impacts continues to evolve. Currently, LWUs and councils are managing the testing process based on advice from NSW Health. However, stricter PFAS standards could result in increased detections, potentially escalating costs for LWUs as they adapt to the new requirements. Further, it is just not an issue of PFAS contaminants in drinking water but also in biosolids which are the byproducts of sewerage treatment. Previously, biosolids were sold as fertilisers but their market demand has declined due to the public's growing awareness of PFAS.

More broadly, to manage the issue of PFAS there may be a need for wider government action and regulation to restrict the use of PFAS, such as in consumer products including food packaging, food and cosmetics. Without regulations to limit the sale and import of products containing PFAS, controlling contamination in water will remain challenging.

Indeed, in November 2024 the LGNSW Annual Conference unanimously resolved to call on the NSW Government to use the *Plastic Reduction and Circular Economy Act 2021* to ban intentionally added PFAS in all products that may impact human health especially all food packaging and products.

## Public sector resourcing and coordination amongst relevant agencies in preventing controlling and managing the risks of PFAS to human health and the environment

Sufficient resourcing within key government agencies such as NSW Health and NSW DCCEEW, is important in effectively responding to and managing the risks of PFAS to human health and the environment. These agencies play a key role in monitoring and providing guidance on PFAS management and ensuring that public health and environment are protected. Resourcing through adequate funding and staffing will ensure these agencies are able to carry out their duties effectively, particularly given the complex issue of PFAS.

Further, LWUs already face significant challenges through limited funding and staffing in rural and regional areas. Without continued support, advice and funding from the NSW Government, LWUs will struggle to adequately address both current and future PFAS contamination issues in drinking water. This includes maintaining the safety and quality of water for their communities, as well as implementing necessary testing and remediation measures.

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<sup>13</sup> NSW Health, [Water utilities](#)

## Key Recommendations:

On balance, to address the challenges posed by PFAS contamination and ensure the safety of drinking water supplies, LGNSW proposes the following recommendations:

- 1) **Support for PFAS screening:** That NSW Health continue to support all LWUs in screening for PFAS.
- 2) **Public education:** That the NSW Government lead public education campaigns to help communities understand PFAS standards and interpret drinking water quality data effectively.
- 3) **Ongoing investigations:** That the NSW EPA continue its PFAS investigation program.
- 4) **Support for Aboriginal Communities:** That the NSW Government continue to support Aboriginal communities, particularly through initiatives such as the Aboriginal Communities Water and Sewerage Program (ACWSP), to ensure access to safe and reliable water supplies.
- 5) **Financial assistance to LWUs:** That the NSW Government provide financial assistance to LWUs to:
  - a) Meet stricter PFAS standards;
  - b) Upgrade drinking water treatment systems to address PFAS contamination; and
  - c) Undertake PFAS cleanup measures.
- 6) **Addressing broader sources of PFAS:** That the NSW and Australian Governments work together to remove PFAS from food packaging, food, cosmetics, and other sources that may contaminate compost made from food and garden organics (FOGO).
- 7) **Adequate resourcing:** That the NSW Government sufficiently resource NSW Health and the NSW DCCEEW to ensure they can carry out their responsibilities related to managing PFAS risks effectively.

## Conclusion

PFAS contamination is a complex issue that impacts water suppliers including LWUs in NSW, with significant implications for public health, the environment and the economy. More stringent measures in PFAS testing will inevitably result in an escalation in costs for LWUs, which are already operating within constrained budgets and capacity. The financial burden of addressing and managing PFAS risks, including monitoring and potential remediation efforts, cannot be shouldered by LWUs alone and will require ongoing guidance and support from the NSW and Australian Governments to ensure the continued safety and quality of drinking water, particularly in rural and regional communities.

## APPENDIX A - TERMS OF REFERENCE

That a select committee be established to inquire into and report on PFAS (per and polyfluoroalkyl substances) contamination in waterways and drinking water supplies throughout New South Wales, and in particular:

- (a) the adequacy and extent of monitoring and data collection on PFAS levels in waterways and drinking water sources
- (b) the adequacy of the reporting and disclosure requirements to the public of monitoring and findings on PFAS contamination of water
- (c) the identification of communities at risk from PFAS contamination
- (d) the adequacy and effectiveness of government engagement with and support for communities disproportionately affected by PFAS contamination, including First Nations communities
- (e) sources of exposure to PFAS, including through historic and current firefighting practices
- (f) the health, environmental, social, cultural and economic impacts of PFAS
- (g) the impacts, monitoring and mitigation of contamination on livestock, domestic animals and wildlife, including water birds, fish and other aquatic life
- (h) the structure, capacity, capability and resourcing of New South Wales Government agencies and water utilities to detect, monitor, report on, respond to and mitigate against PFAS contamination of water supplies, including the adequacy of infrastructure and resources
- (i) the adequacy and effectiveness of New South Wales's legislative and regulatory framework in testing for, monitoring, mitigating and responding to PFAS contamination, including the adequacy of health-based guidance values, as compared to the standards and practices of other Australian and international jurisdictions
- (j) public sector resourcing and coordination amongst relevant agencies in preventing, controlling and managing the risks of PFAS to human health and the environment
- (k) international best practices for water treatment and filtration, and the environmentally sound management and safe disposal of PFAS

- (l) the effectiveness of remediation works on specific sites and international best practices for remediation and management of contaminated sites
- (m) areas for reform, including legislative, regulatory, public health and other policy measures to prevent, control and manage the risks of PFAS in water supplies
- (n) the impact of taking contaminated water sources offline on water security, including the effects of diverting water between communities; the social, economic and logistical implications of such diversions, and the challenges posed by PFAS contamination to water availability, drought management and emergency supply planning, and
- (o) any other related matters.

That the committee report by 20 June 2025.

The terms of reference for the inquiry were referred to the committee by the Legislative Council on 25 September 2024.

#### **Committee membership**

<b>Ms Cate Faehrmann MLC</b>	The Greens	<i>Chair</i>
<b>Hon Taylor Martin MLC</b>	Independent	<i>Deputy Chair</i>
<b>Hon Scott Barrett MLC</b>	The Nationals	
<b>Hon Greg Donnelly MLC</b>	Australian Labor Party	
<b>Hon Stephen Lawrence MLC</b>	Australian Labor Party	
<b>Hon Aileen MacDonald MLC</b>	Liberal Party	
<b>Hon Cameron Murphy MLC</b>	Australian Labor Party	