

Defence

# **Community Consultation Session PFAS Investigation and Management Program**

### **PFAS INVESTIGATION AND** MANAGEMENT PROGRAM

### **RAAF Base Amberley PFAS Investigation and Management Program update Tuesday 6 August**

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Defending Australia and its National Interests www.defence.gov.au





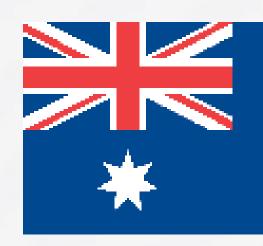
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# **Acknowledgement of Country**

We respectfully acknowledge the Yuggera and the Ugarapul people, the traditional custodians of the land on which we are meeting today.

Defence acknowledges the Traditional Custodians of Country throughout Australia. Defence recognises their continuing connection to traditional lands and waters and would like to pay respect to their Elders both past and present.

Defence would also like to pay respect to the Aboriginal and Straight Islander peoples who have contributed to the defence of Australia in times of peace and war.



### **PFAS INVESTIGATION AND** MANAGEMENT PROGRAM





# Torres



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### The Hon Shayne Neumann MP, Member for Blair

### **PFAS INVESTIGATION AND MANAGEMENT PROGRAM**





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### **About PFAS**

- What are PFAS?
- PFAS and health \_

### How Defence responds to PFAS contamination

- Led by science \_
- \_\_\_\_

## **PFAS at RAAF Base Amberley**

- Initial investigations \_\_\_\_
- \_
- \_
- Precautionary advice -
- Next steps \_\_\_\_

### Questions

### **PFAS INVESTIGATION AND MANAGEMENT PROGRAM**

How PFAS moves in the environment

Investigation and planning

Remediating and managing

Remediation and management planning

Groundwater, surface water and sediment monitoring

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### What are **PFAS**?

Mining and oil well surfactants

Non-stick cookware



Floor polishes

> Aviation hydraulic fluids

# **PFAS INVESTIGATION AND MANAGEMENT PROGRAM**



Mist suppressant in metal plating industry Stain resistant products

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Personal care products



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## How PFAS moves in the environment

**THE SOURCE** 

Legacy firefighting foams used for training and to extinguish liquid fuel fires

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PFAS PFAS

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Groundwater Table

# **PFAS INVESTIGATION AND MANAGEMENT PROGRAM**

### **PEOPLE, PLANTS AND ANIMALS**

Aquatic biota in drains/creeks, land animals including pets and stock



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PFAS

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Sprinkler using bore water

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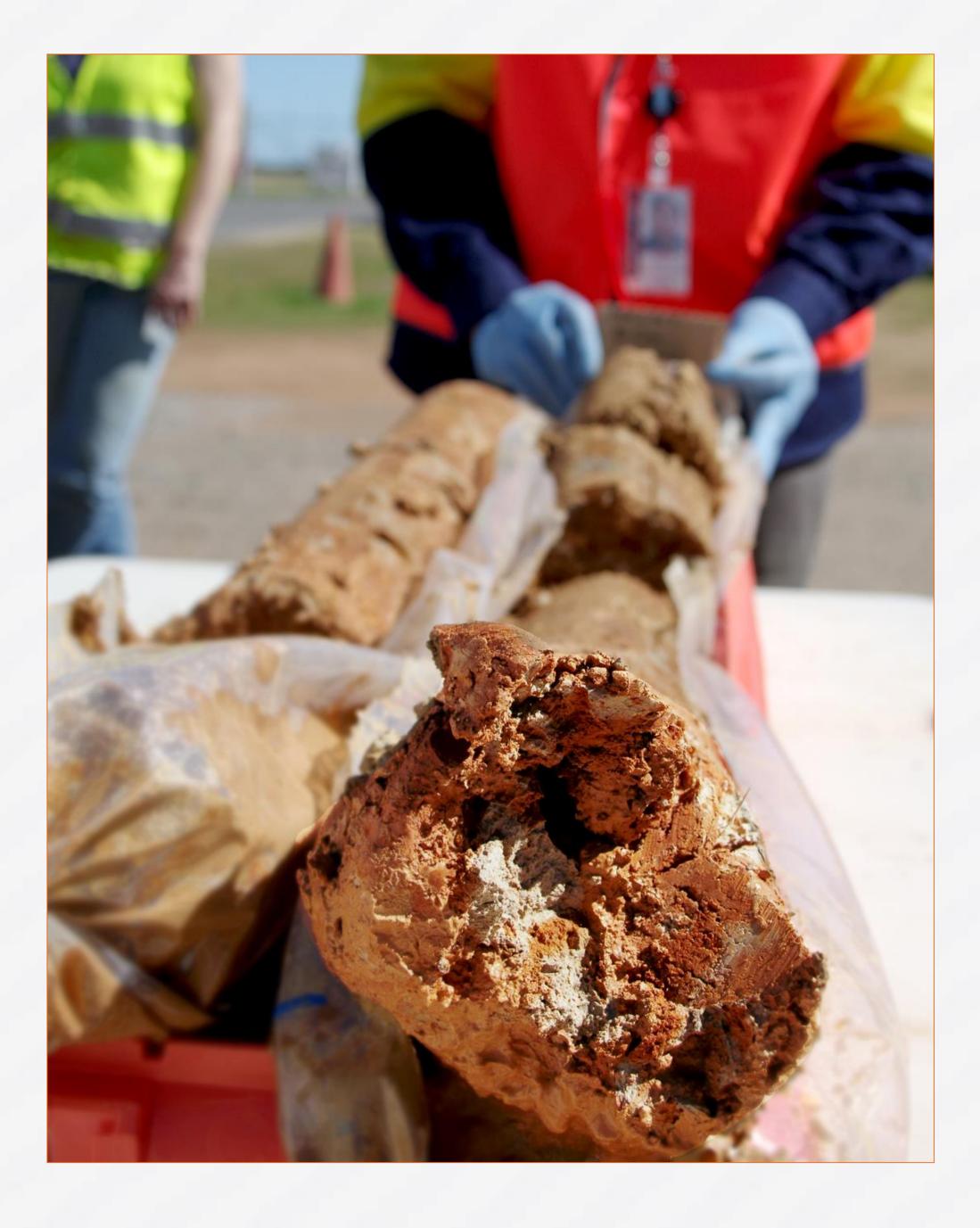


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### Our response

- The PFAS Investigation and Management Program was established in 2015.
- Responding to PFAS contamination is a complex issue and requires an effective and evidence-based approach.
- Defence works with other agencies and industries in Australia and internationally to share knowledge and work together to ensure the most appropriate remediation techniques are used and to continuously improve our management approach.

### **PFAS INVESTIGATION AND MANAGEMENT PROGRAM**



Soil sample taken as part of the Defence and CSIRO collaborative research program.





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## Australian health guidelines



authorities.

### The Commonwealth Government takes a precautionary approach and recommends PFAS exposure is minimised where possible.



Research on the health affects of PFAS undertaken in Australia and internationally is continuously evolving. Defence will respond accordingly as new guidelines and health advice become available.

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### Defence relies on health guidance from the Department of Health and Aged Care, Food Standards Australia New Zealand and relevant state







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## Health-based guidance values





### Drinking water guideline

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### **PFOA**





**Recreational water guideline** 

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### Our approach



### Phase 1 Investigating and planning

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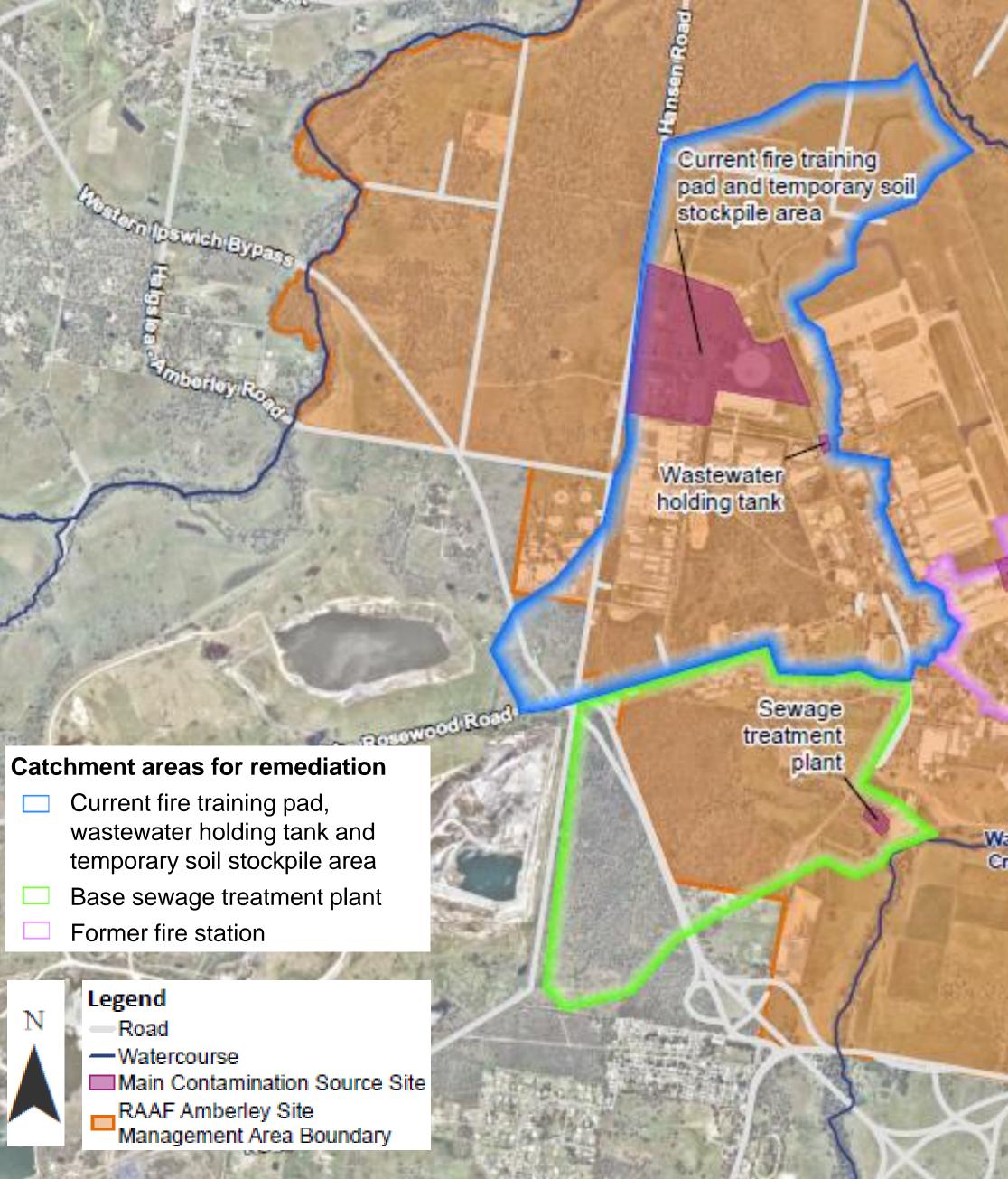
### Phase 2 Remediating, managing and ongoing monitoring

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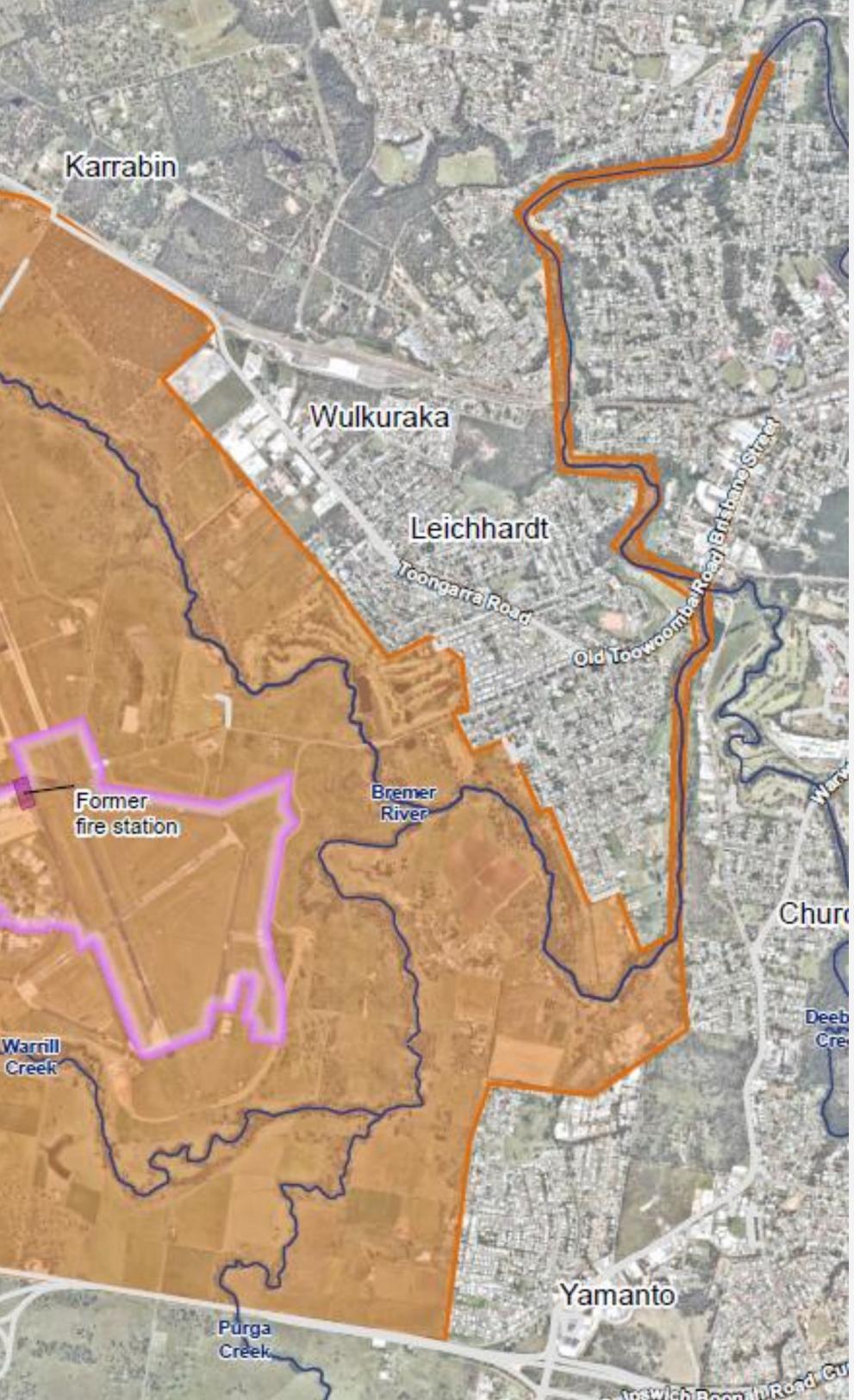


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## Management area and source areas



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### **Source areas**

- - migration.

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PFAS source areas at RAAF Base Amberley are found where firefighting foam was previously used, stored or disposed of.

Five key source areas include:

current fire training pad

wastewater holding tank

temporary soil stockpile area

base sewerage treatment plant

former fire station.

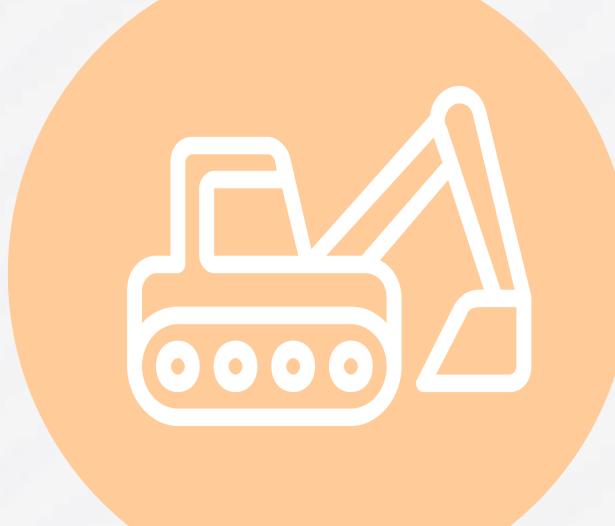
Remediation will focus on managing surface water catchments to reduce PFAS

Three revised remediation action plans will be finalised ahead of further works commencing.



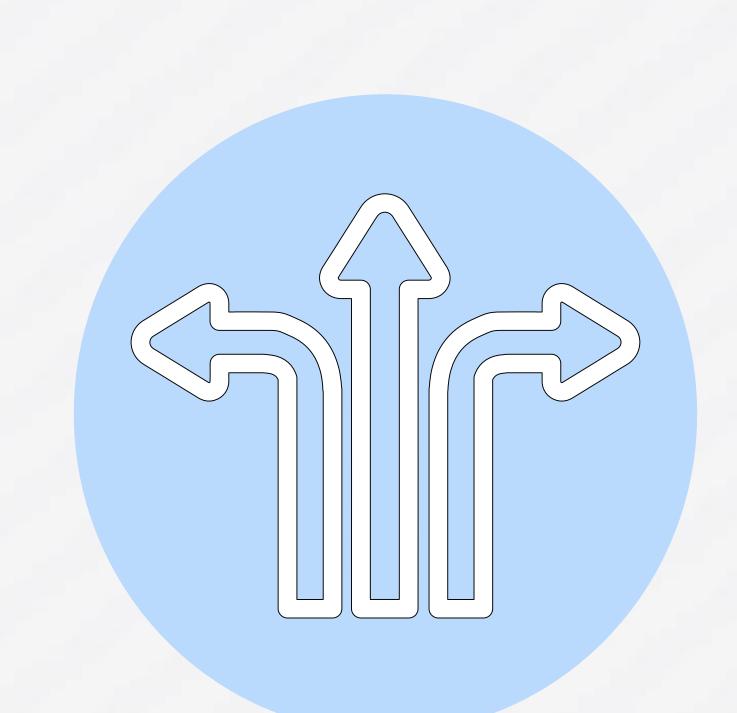
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### Management approach



### Source controls Manage the source areas

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### Pathway controls

Targets the paths by which PFAS leaves the base





### **Exposure controls** Follow existing precautionary advice to reduce exposure



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## **Ongoing monitoring results**

Number of samples collected and a March 2021 – April 2024

### GROUNDWATER



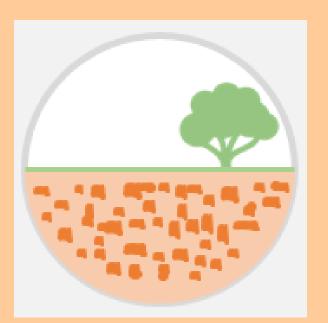
Groundwater is wate the earth's surface. supplies bores, wells springs.

### **SURFACE WATER**



Surface water is water collects on the ground can be in the form of rivers, lakes, wetland oceans and more. It accumulates from rates

### SEDIMENT



Sediment is made of down remains of room minerals, plants, and that is moved and do to a new location.

### **PFAS INVESTIGATION AND MANAGEMENT PROGRAM**

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er beneath It often Is or	271 samples collected from 40 groundwater monitoring locations on and off base.	<ul> <li>C</li> <li>S</li> <li>E</li> <li>T</li> <li>T</li> <li>C</li> </ul>		
ater that ind and of creeks, ids, t also ainfall.	327 samples collected from 49 surface water locations on and off base.			
of broken cks, d animals deposited	338 samples collected from 49 sediment locations on and off base.	• 7 r t		

### ecent key findings

The findings from the most recent ongoing monitoring report do **not** suggest a change in any potential exposure risks for the community or the environment

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The highest levels of PFAS contamination were at known, onbase source areas.

Slight increases recorded in several groundwater locations along the base boundary to the west and south-east...

Community members should continue following Queensland Health's precautionary advice for fish consumption.

The 2021-2023 ongoing monitoring report and factsheet is available on the Defence website.



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# **Remediation at RAAF Base Amberley – a multi phased approach**



Remediation of source areas aims to reduce PFAS leaving the base.



Defence is developing remediation action plans for three major surface water catchment areas.



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Remedial works will be completed progressively through to 2028.



Ongoing monitoring will continue throughout, and beyond the remediation period.



informed and publish monitoring data.

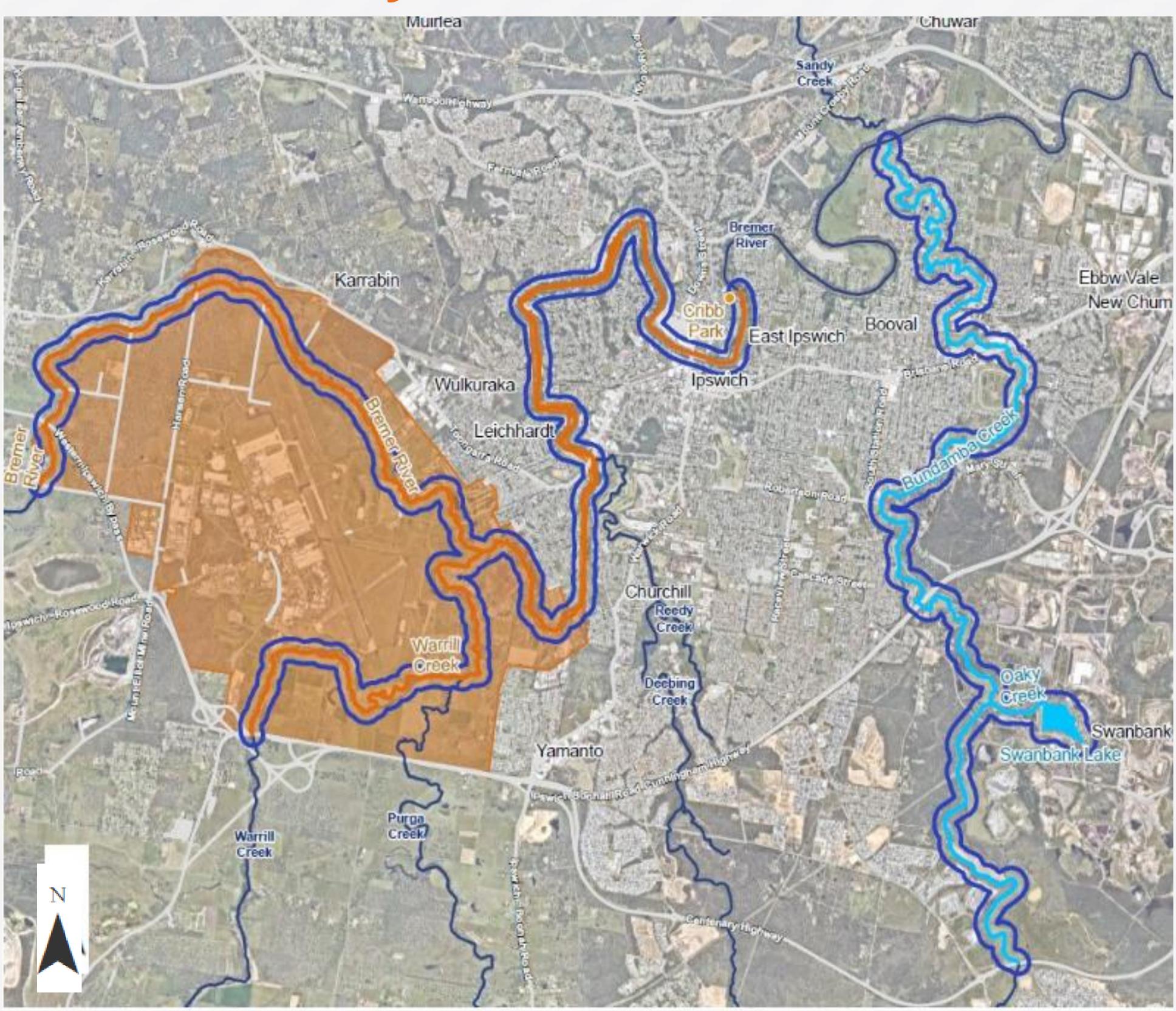


# Defence will continue to keep the community



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## **Precautionary health advice**



### **PFAS INVESTIGATION AND** MANAGEMENT PROGRAM

### **Precautionary health advice** remains in place.

Fish caught in the below areas should **not** be consumed.

- to Cribb Park, Ipswich
- Amberley.

The areas (shown in **blue** on the map) contain PFAS from other sources, not RAAF Base Amberley):

- Centenary Highway.

In all of these areas, fish should not be eaten. All fishing should be catch and release only.



Bremer River in areas adjacent to **RAAF Base Amberley and downstream** 

Warrill Creek adjacent to RAAF Base

Swanbank Lake and Oaky Creek

Bundamba Creek downstream of the



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## Next steps

Action 2 – Revise the PFAS Management Plan Action 3 – Upgrade the monitoring well network Action 4 – Develop three remediation action plans Action 5 – Commence new remediation works

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- Action 1 Continue monitoring groundwater, surface water and sediment
- Action 6 Continue to keep the community informed





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### **Australian Government**

### **Department of Health and Aged Care**



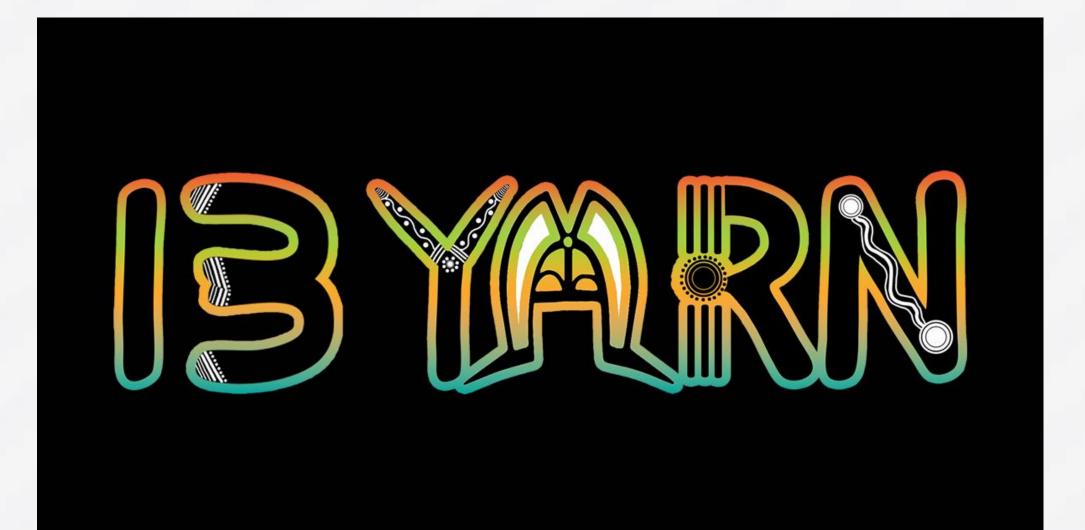
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### **Australian Government**

### **Department of Veterans' Affairs**







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# **PFAS INVESTIGATION AND MANAGEMENT PROGRAM**

# Questions





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### **Contact us**



**Email:** 



Website: www.defence.gov.au/about/locationsproperty/pfas/pfas-management-sites/raaf-baseamberley

### **PFAS INVESTIGATION AND** MANAGEMENT PROGRAM

### **Phone:** 1800 333 362

### pfas.enquiry@defence.gov.au



