



Community Information Session

PFAS Investigation and Management Program

RAAF Base Darwin

PFAS Investigation and Management Program update

15 October 2024





Acknowledgement of Country

We would like to acknowledge the **Larrakia people** as the traditional custodians of the land we meet on 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 Torres Strait Islander peoples who have contributed to the defence of Australia in times of peace and war.





Outline



About PFAS

- What are PFAS?
- How PFAS moves in the environment
- PFAS and health

How Defence responds to PFAS contamination

- Led by science
- Investigation and planning
- Remediating and managing

PFAS at RAAF Base Darwin

- PFAS management area and sources
- Remediation
- Monitoring results
- Precautionary dietary advice
- Next steps

Questions

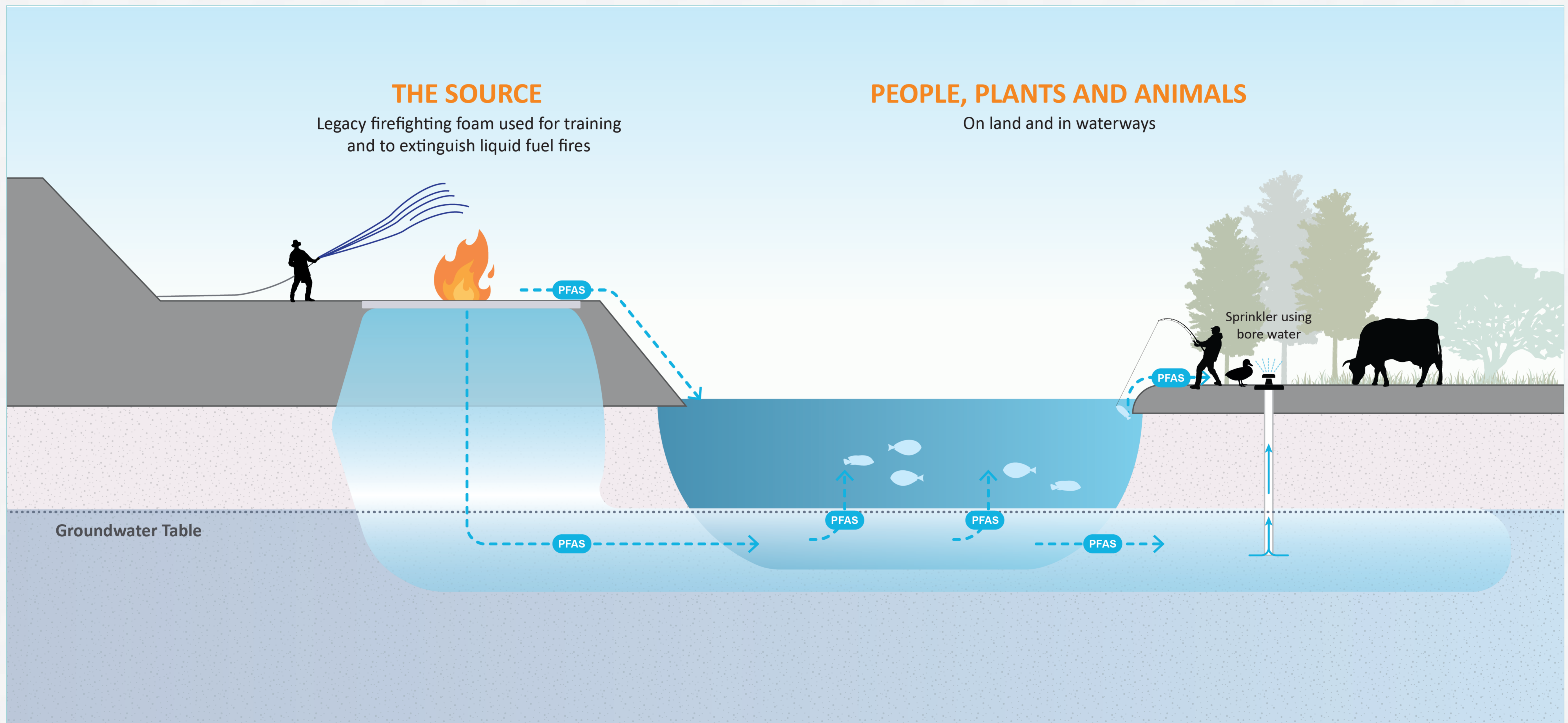


What are PFAS?



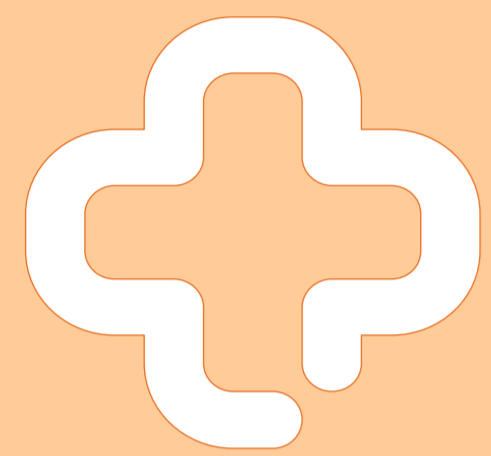


PFAS movement through the environment





Australian health guidelines



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



Health based guidance values

PFOS

PFOA

PFHxS



Drinking water guideline



Recreational water guideline



Responding to PFAS contamination – led by the science

- 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.



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



Our approach



Phase 1

Investigating and planning

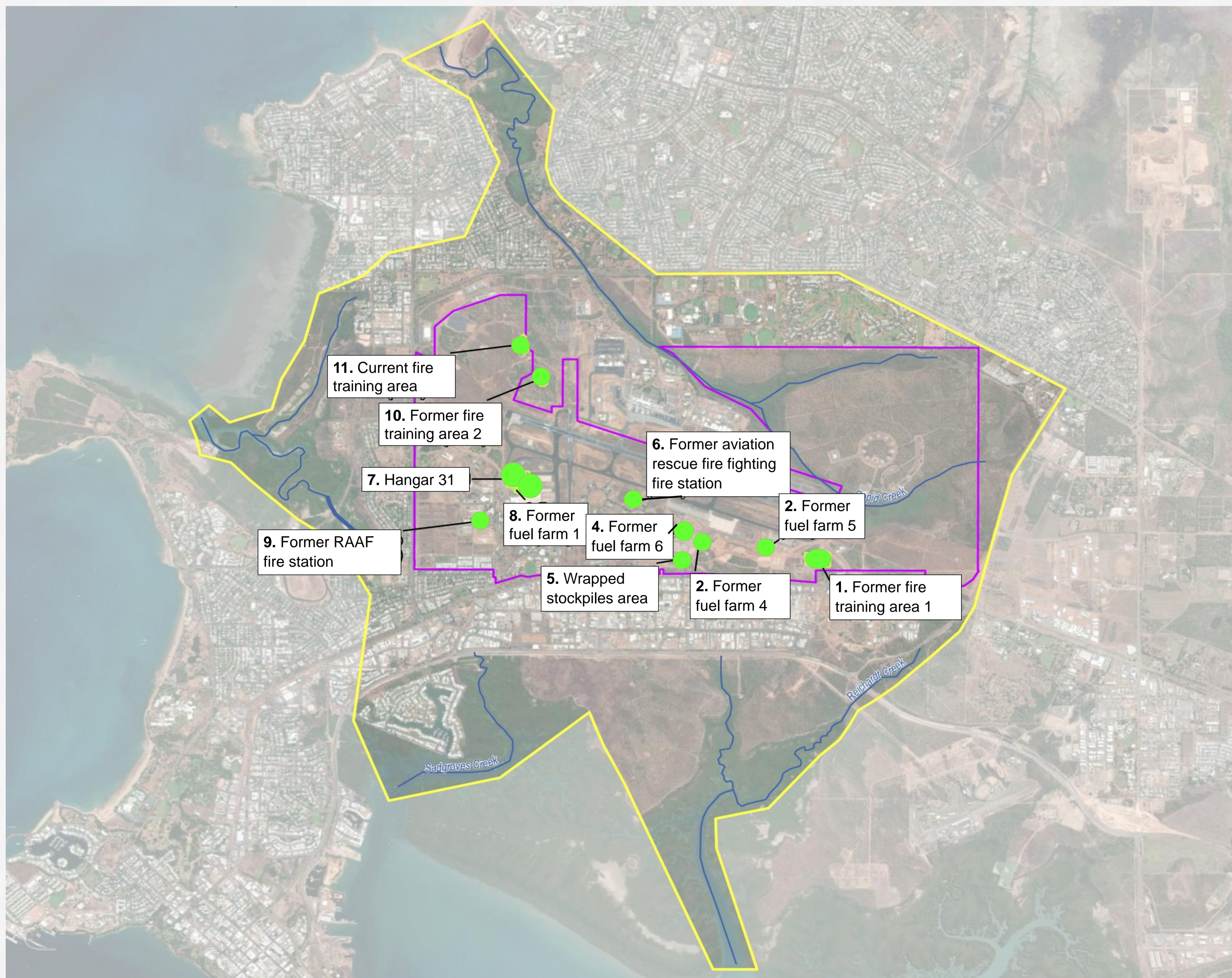


Phase 2

Remediating, managing and
ongoing monitoring



Management area and source areas



Legend	
	Creek
	Base boundary
	Management area
	PFAS source area
1.	Former fire training area 1
2.	Former fuel farm 5
3.	Former fuel farm 4
4.	Former fuel farm 6
5.	Wrapped stockpiles area
6.	Former aviation rescue fire fighting fire station
7.	Hangar 31
8.	Former fuel farm 1
9.	Former RAAF fire station
10.	Former fire training area 2
11.	Current fire training area



Management approach



Source controls

Manage the
source areas.



Pathway controls

Targets the pathways
PFAS leaves the
base.



Exposure controls

Follow existing
precautionary advice
to reduce exposure.



Remediation



The aim of remediation is to minimise PFAS leaving the base by focusing on source areas.



Completed: Remediation at former fire training area 1 and the wrapped stockpile area.



Upcoming: Remediation at former fuel farms 4 and 6, and the current fire training area.



Planning: Remediation for former fire training area 2.





Soil stabilisation

Soil will be excavated for stabilisation or thermal destruction off base

ACTION

Stabilisation involves mixing soil with activated carbon granules

OUTCOME

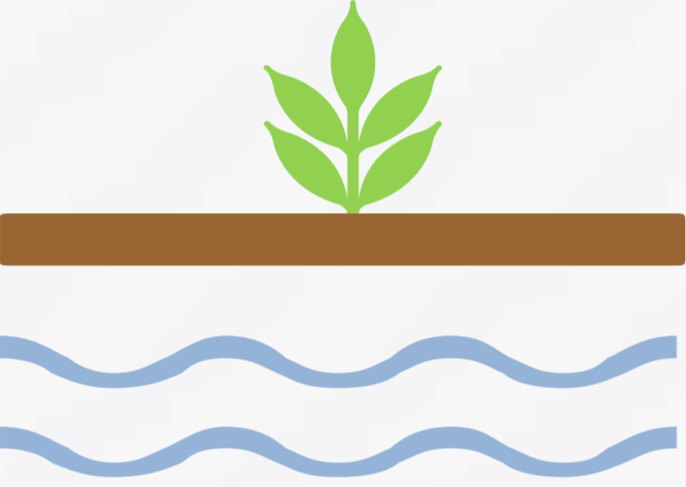

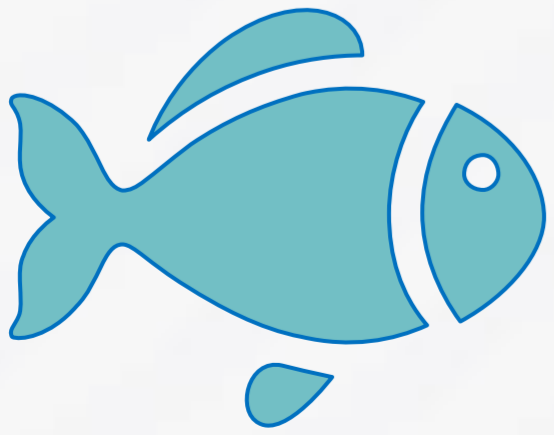
Stabilised soils are reinstated. PFAS is bound within these stabilised soils





Latest monitoring results

Number of samples collected from June 2023 - April 2024

<p>Groundwater</p> 	<p>55 samples collected from 60 groundwater monitoring locations on and off base.</p>
<p>Surface water</p> 	<p>47 samples collected from 6 surface water monitoring locations on and off base.</p>
<p>Aquatic Biota</p> 	<p>60 samples collected from locations around Rapid Creek and Ludmilla Creek.</p>

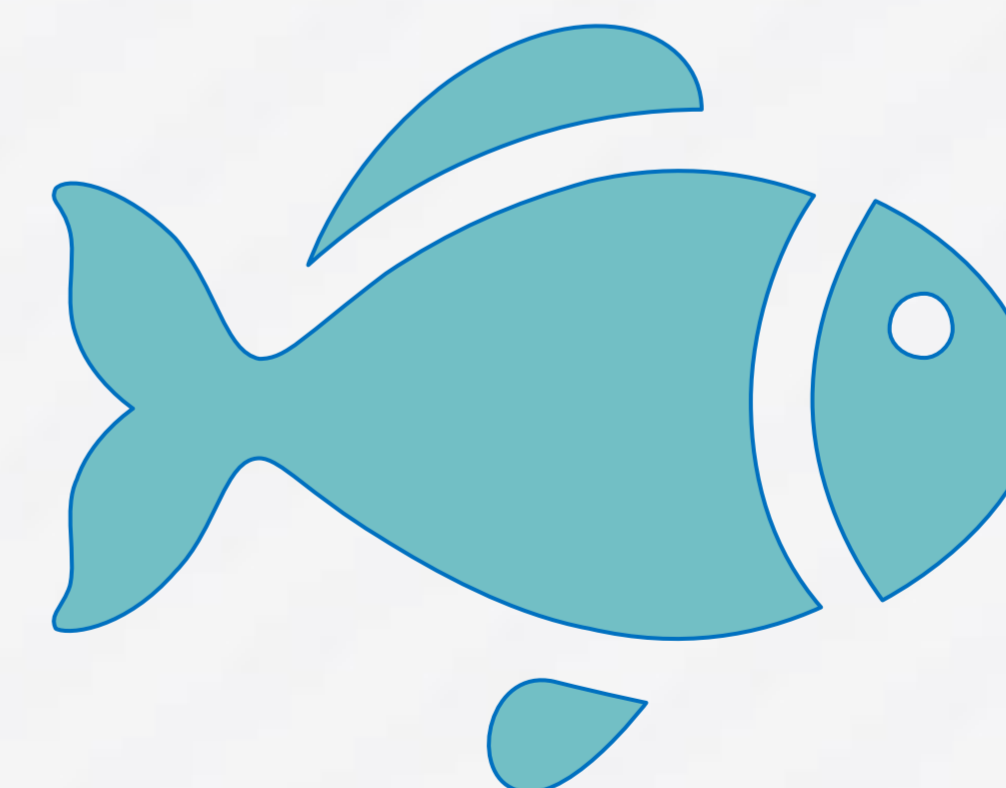
Key findings:

- Latest monitoring results do not suggest a change in any potential exposure risks for the community.
- PFAS concentrations in surface water and aquatic biota were consistent with previous results.
- Groundwater concentrations were either stable or decreasing.
- The highest concentrations of PFAS were found at the source areas planned for remediation.
- Residents should continue to follow NT Health's precautionary dietary advice.



Precautionary dietary advice

NT Government has issued precautionary dietary advice for community members to **guide** how much **fish**, **shellfish** and **crustaceans** they eat from **Rapid Creek** and **Ludmilla Creek**.





Next steps

Continue monitoring on and around RAAF Base Darwin



Commence remediation at the former fuel farms 4 and 6,
and the current fire training area



Continue planning for the remediation of all remaining source
areas



Renew precautionary advice signs for fishing at Ludmilla and
Rapid creeks



Keep the community informed





Support



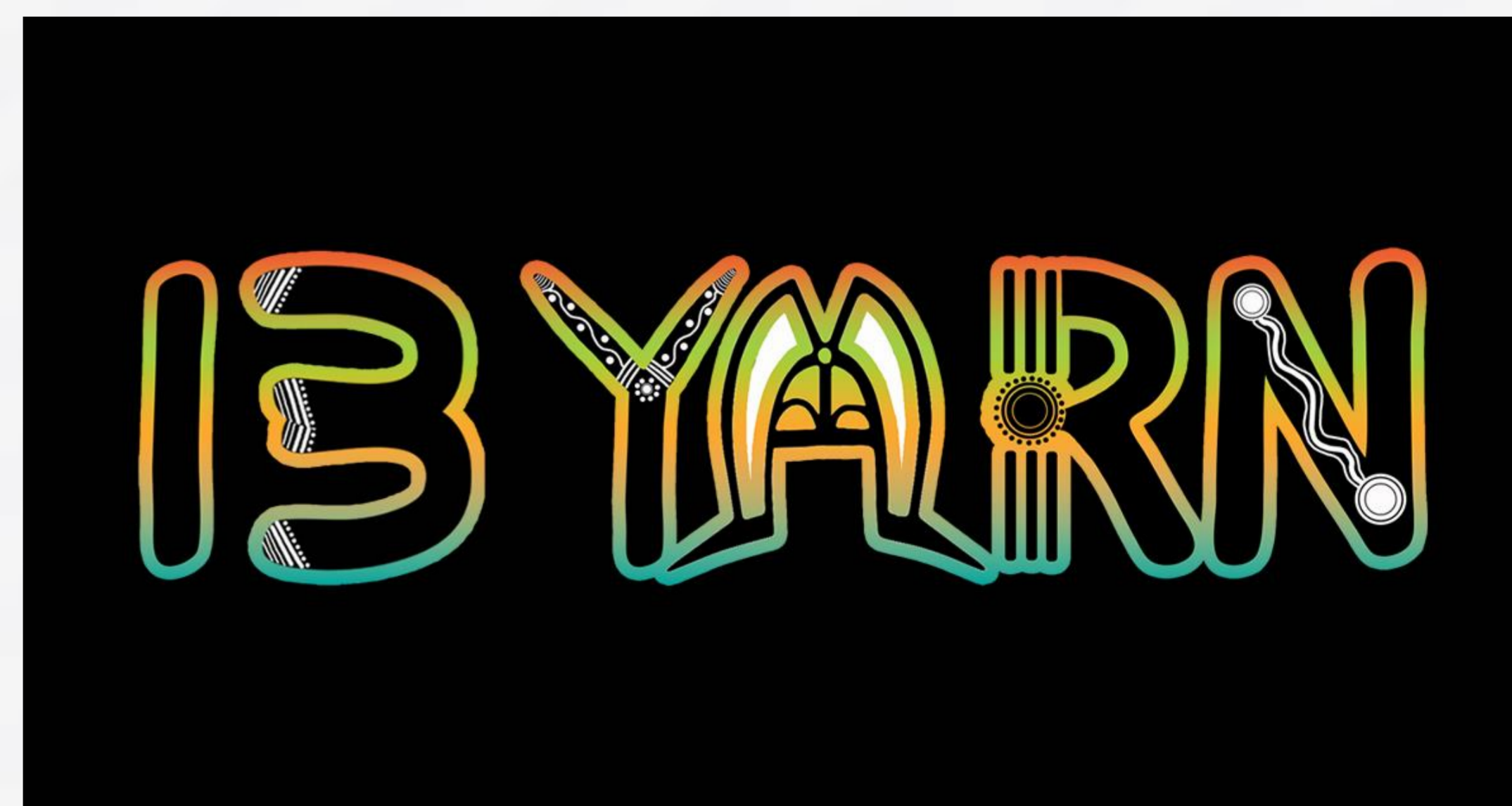
Australian Government

Department of Health and Aged Care



Australian Government

Department of Veterans' Affairs





Questions



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Website: www.defence.gov.au/about/locations-property/pfas/pfas-management-sites/raaf-base-darwin