



Community Information Session

PFAS Investigation and Management Program

RAAF Base Tindal
Update on PFAS Investigation and Management Program
Tuesday 29 August 2023





Acknowledgment of Country

We respectfully acknowledge the Dagoman, Wardaman and Jawoyn people, the traditional custodians of the land on which this meeting takes place, and also pay respect to Elders both past and present.

We would also like to pay our respects to the Indigenous men and women who have contributed to the defence of Australia in times of peace and war.





Welcome



Session outline:

- What are PFAS?
- Findings from the environmental investigation
- Recent progress and activities
- Ongoing Monitoring Plan update
- 2023 Ongoing Monitoring Interpretive Report key findings
- Next steps
- Questions

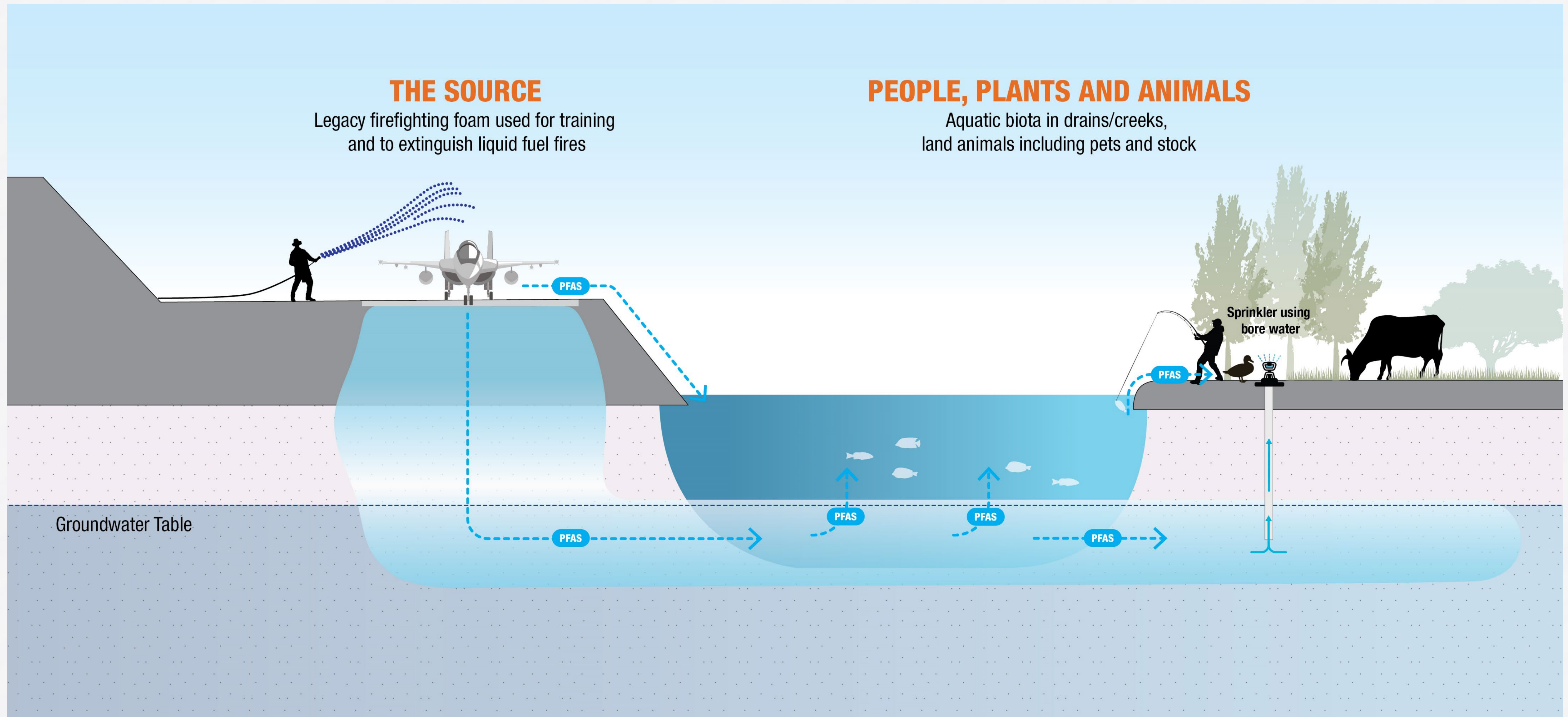


What are PFAS?





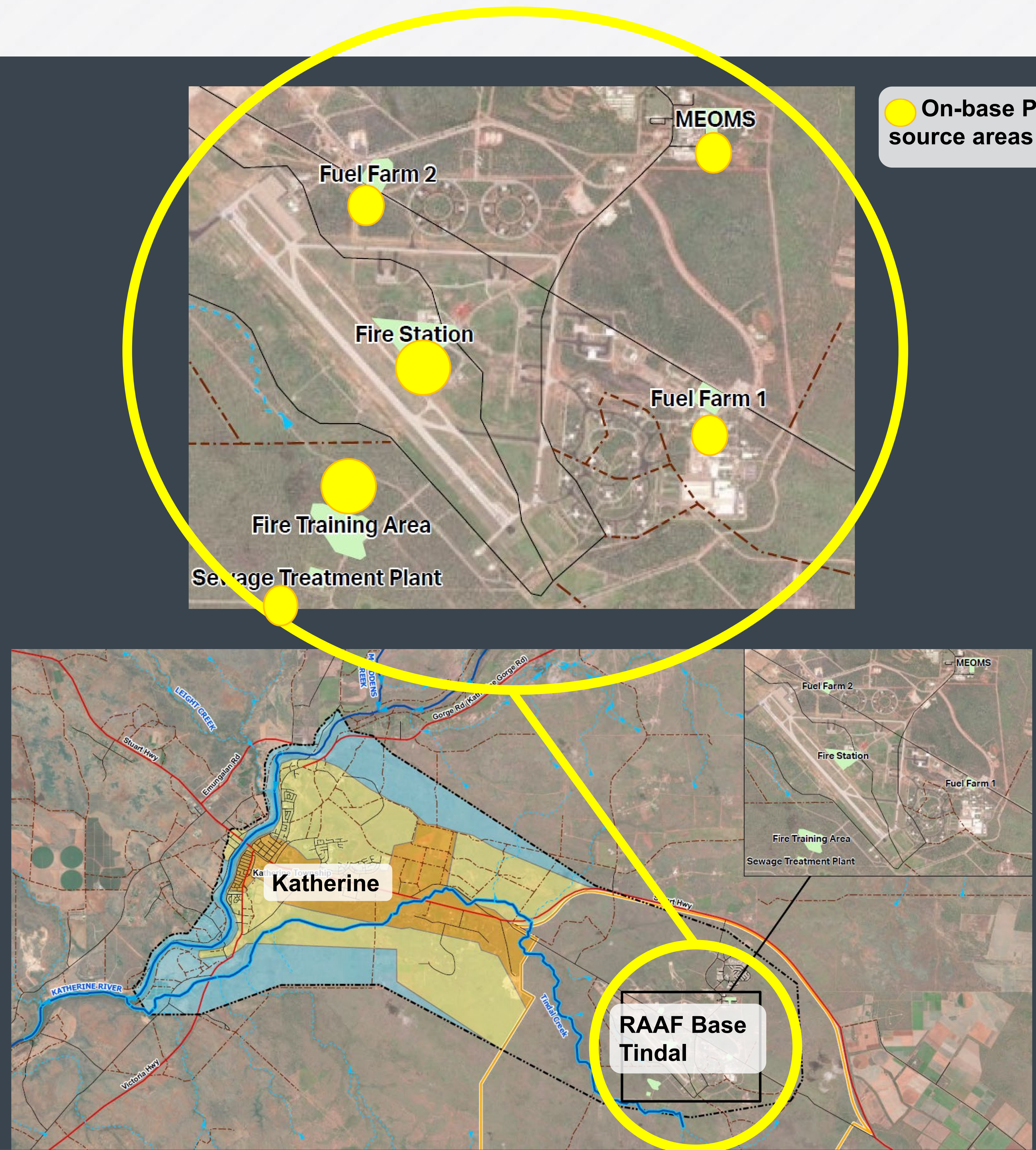
How PFAS moves in the environment





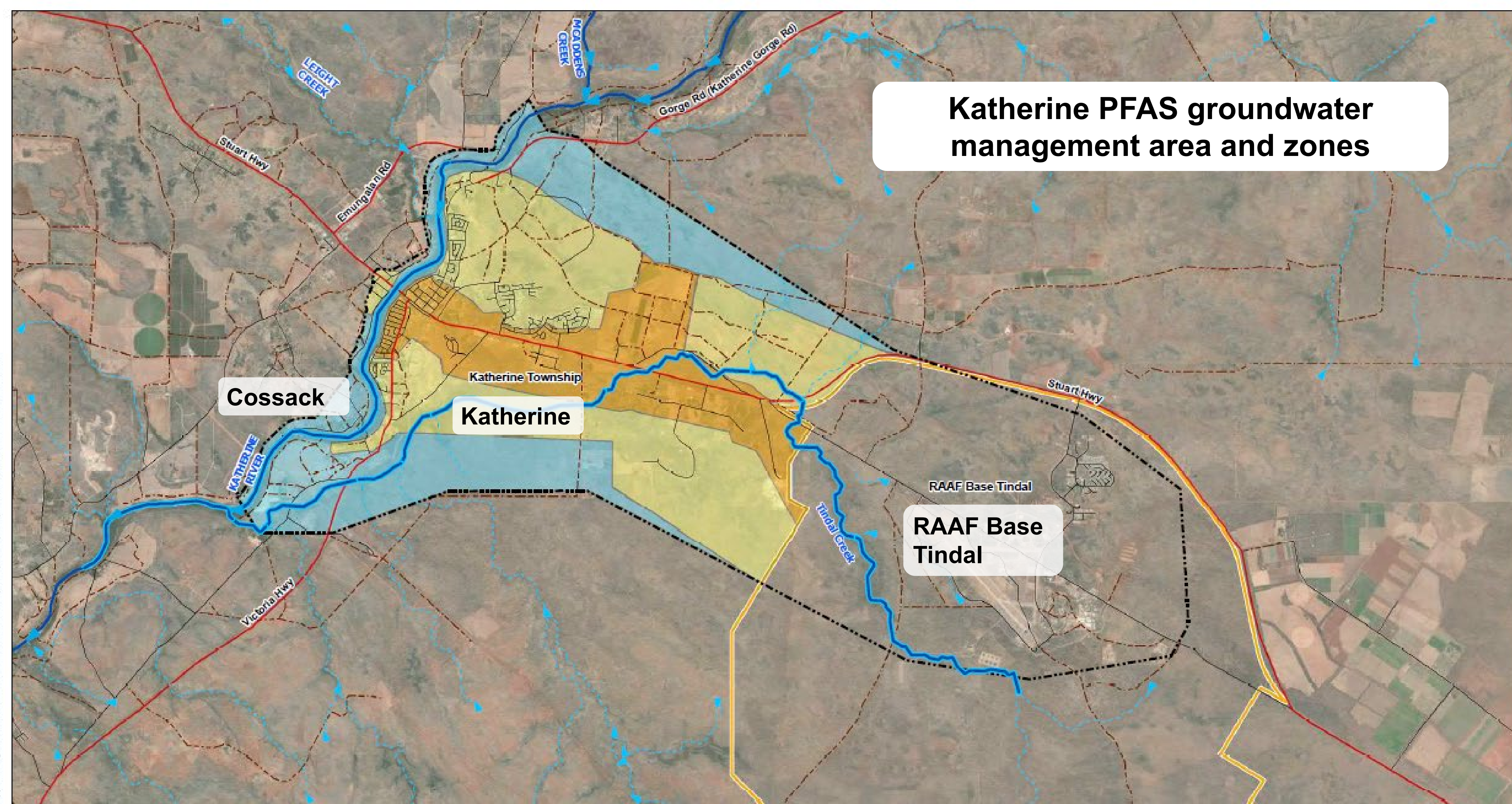
Key investigation findings

- Investigations were completed in November 2018
- Two main source areas were identified:
 - Fire Training Area
 - Fire Station Area
- It identified PFAS is moving through the environment via groundwater and surface water.
- PFAS Management Area Plan (PMAP) developed (June 2019).





PFAS management area and zones



Katherine PFAS groundwater management area and zones

Legend

- Surface Water Management Area
- Zone 1 Groundwater > Recreational Water Criteria
- Zone 2 Groundwater > Drinking Water Criteria
- Zone 5 Groundwater < Criteria
- Groundwater Management Area
- Highway
- Road
- Track
- Katherine River
- Drainage
- RAAF Base Tindal



What's happened since the June 2022 community session?



Fire Training Area Treatment Plant



Fire Station Treatment Plant

Water treatment plants

- Continued operation of 2 on-base groundwater treatment plants.
- Continued operation of water treatment plant in Katherine to treat bore water currently used for town water supply.
- Review of groundwater treatment plants for effectiveness commenced and ongoing in order to improve performance.



2.51 billion litres of PFAS-contaminated groundwater has been treated to date



That is equivalent to **1000 Olympic-sized swimming pools.**



Works completed since the June 2022 community information session



Soil remediation

Fire training area:

- Over 9,000m³ of soil excavated, treated and reinstated on Base.
- Further 8,600m³ currently being excavated for treatment
- Highly PFAS-impacted soils sent for thermal treatment at a licensed facility.

Fire station area:

- 12,000m³ excavated, with all soils successfully treated and reinstated.
- No off-site soil disposal required.



Soil remediation underway at the fire station area and fire training area



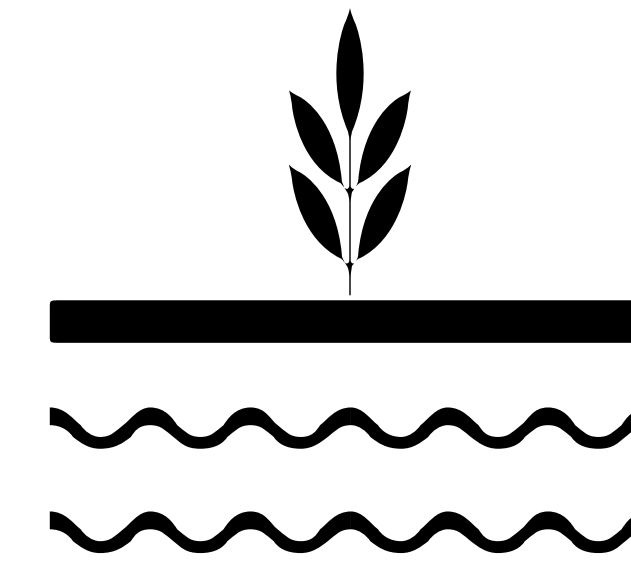
Town water supply

- Defence is working with the NT Power & Water Corporation to treat PFAS impacted water before it enters town water supply.
- 2017: Defence funded a water treatment plant in Katherine to filter PFAS from groundwater.
- Defence is now funding the construction and operation of a new permanent PFAS treatment plant in Katherine.
- The new plant will treat up to 10 million litres of water per day.
- Drinking water is tested regularly by the NT Power & Water Corporation.
- Water sampling results are provided to NT Health and published on the Defence PFAS website.
- Results are below Health Based Guidance Values for PFAS.
- The Chief Health Officer has advised the public drinking water is safe.
- Where people rely on PFAS-impacted bore water, Defence is providing bottled water as an interim solution, or rainwater tanks as a long-term solution.

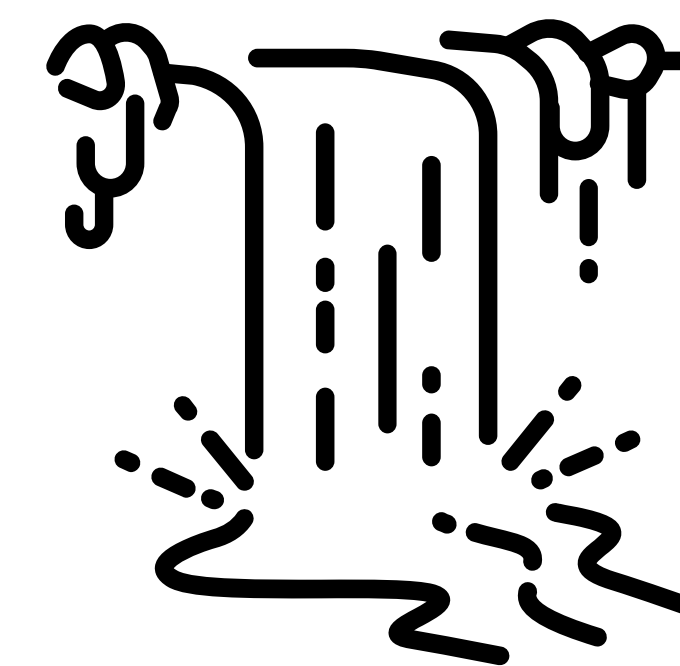


Ongoing Monitoring Plan

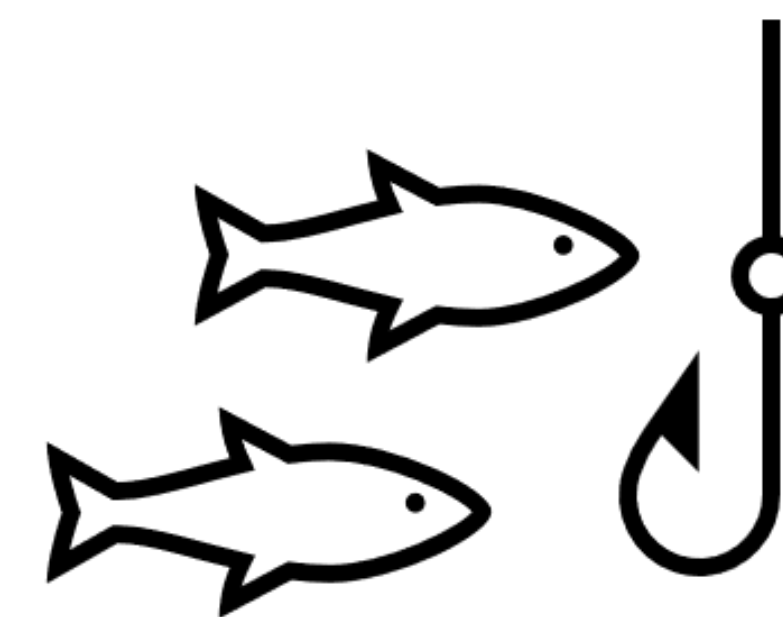
- Started in 2019.
- Involves regular sampling across monitoring area (on and off-base).
- Tracks changes in PFAS concentrations over time
- Sampling occurs across both the wet and dry seasons.



342 groundwater samples from 41 locations



91 surface water samples from 13 locations



105 aquatic fish and crustaceans samples from 2 locations*

Samples collected April 2021 – June 2023

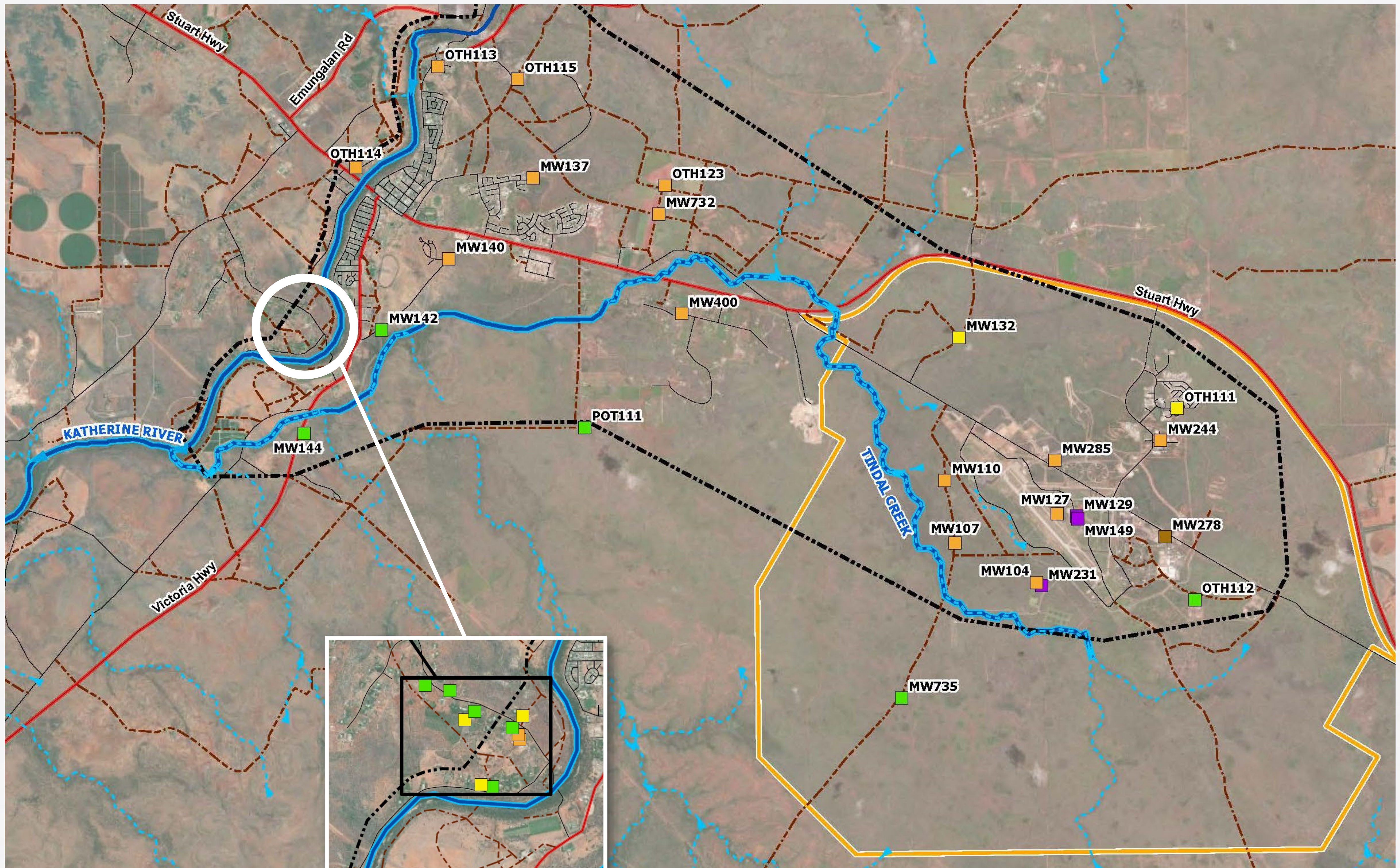
2023 Ongoing Monitoring Interpretive Report

Key findings:

- Elevated PFAS concentrations in groundwater continue to be found closest to source areas on-base.
- Recent sampling in the Cossack area has found first time detections of PFAS. This is being further investigated.
- As a precautionary measure, further sampling and analysis being conducted in the Cossack area to better understand how and where PFAS changes are occurring.
- Reduced PFAS concentrations have been observed in Tindal Creek after recent soil remediation.
- PFAS found in public swimming locations are below recreational guidelines.
- PFAS in aquatic biota (fish, shellfish and crustaceans) are similar to previous results.
 - Continue following NT Health advice regarding consumption.
- **Despite recent changes in PFAS concentrations, there are no significant change in risk to human health.**



Ongoing Monitoring Plan





Cossack area update

What is happening in the Cossack area?

- Recent sampling found first time detections of PFAS or new exceedances of the health-based guideline values.
- PFAS moved through groundwater into areas not previously detected.
- Defence is conducting further sampling and analysis.

What happens next?

- Continue monitoring PFAS within Cossack area, work with residents and keep community informed.

What support is available to residents?

- Ad-hoc water sampling for bore/s and tanks.
- Bottled water as interim measure for household consumption (drinking and cooking).
- Type of support available depends on the levels of PFAS that may be detected.
- Defence will continue to monitor the management areas and provide support to residents as required.



Next steps



Complete soil remediation late 2023.

On base water treatments plants continue operation.

Progress new permanent water treatment plant with NT Power & Water Corporation.



Update the community



Continue monitoring PFAS in the Cossack area, work with and support residents.



OMP sampling

- August 2023
- October 2023
- Monthly wet season sampling starts November 2023.



Questions



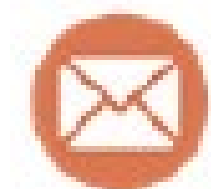


Thank you for attending

Contact us



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Website: <https://www.defence.gov.au/about/locations-property/pfas/pfas-management-sites/raaf-base-tindal>

