## RAAF Base Tindal – Soil remediation

## The purpose of remediation is to reduce PFAS leaving the base.

Remediation works are focused on the main source areas:

- Fire Station Area (FSA)
- Fire Training Area (FTA)

# In 2022, soil remediation activities started at the Fire Training Area and Fire Station Area.

- 25,000 tonnes of soil have been treated or destroyed.
- Soils with PFAS concentrations too high to treat effectively are sent for treatment at a thermal destruction facility.

# Over time, the remediation works will reduce the amount of PFAS leaving the source areas.

- Soil within the source areas contains more than 400 kilograms of PFAS.
- Remedial works involve soil and groundwater remediation.
- Soil remediation at the FSA and FTA is expected to be completed in late 2023.



# How does soil remediation work?

A process called stabilisation involves:

- Treating PFAS-impacted soil with activated carbon
- The PFAS binds to the carbon in the soil limiting PFAS mobility.
- The treated soil is then returned and covered with clean topsoil, stopping erosion and minimising interaction with rainwater.

# PFAS INVESTIGATION AND MANAGEMENT PROGRAM

## RAAF Base Tindal – Groundwater Treatment Plants

Since 2017, 3 groundwater treatment plants have been operating on RAAF Base Tindal and in Katherine to remove PFAS from groundwater and reduce amount of PFAS leaving the base.



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



That is equivalent to 1000 Olympic-sized swimming pools.



# How Defence works with NT PowerWater

Defence is working with the NT Power and Water Corporation (PowerWater) to treat PFAS-impacted water before it enters the town water supply.

In 2017, Defence and PowerWater built a water treatment plant in Katherine to remove PFAS from bore water. The plant can treat up to 1 million litres of bore water per day. The water quality is carefully monitored by PowerWater.

Defence is now providing funding for PowerWater to construct and operate a new, larger PFAS treatment plant in Katherine. The new plant will treat up to 10 million litres of water per day. This will help secure a long-term water supply for Katherine.

# RAAF Base Tindal – Cossack Area Update

## What's happening in the Cossack area?

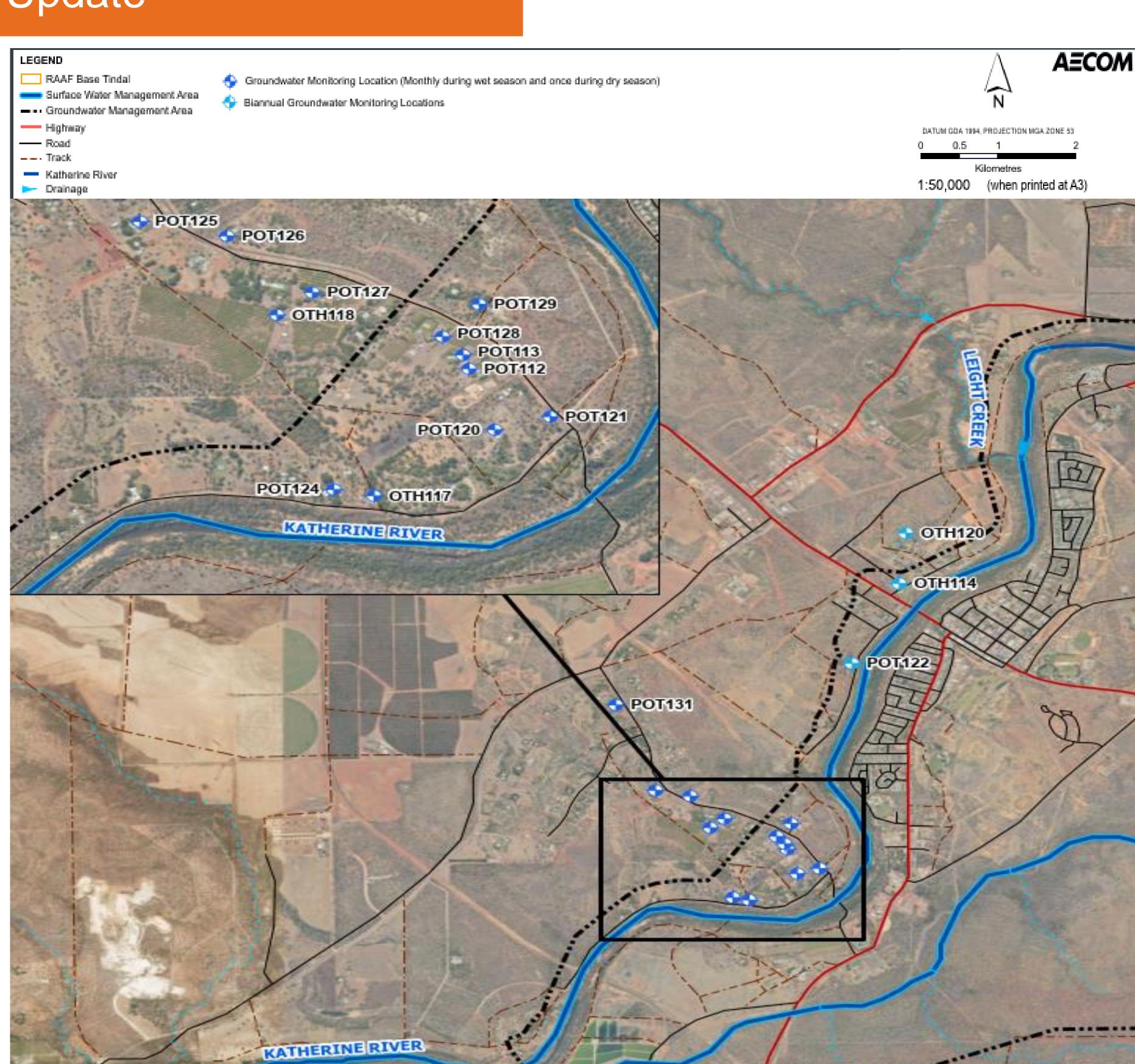
- Recent sampling in the Cossack area found first time detections of PFAS or new detections above health-based guideline values.
- Changes are due to the movement of PFAS through groundwater into areas where it historically has not been detected.

### What support is available to residents?

- Defence is offering Cossack residents and landowners sampling for bore/s and associated tanks.
- While awaiting sampling results, Defence is offering bottled water to residents for household use such as drinking and cooking.

## What happens next?

- Defence is monitoring PFAS movements within the Cossack area and will continue to keep residents and wider community informed.
- Defence is and will continue to offer support to residents pending sampling results.



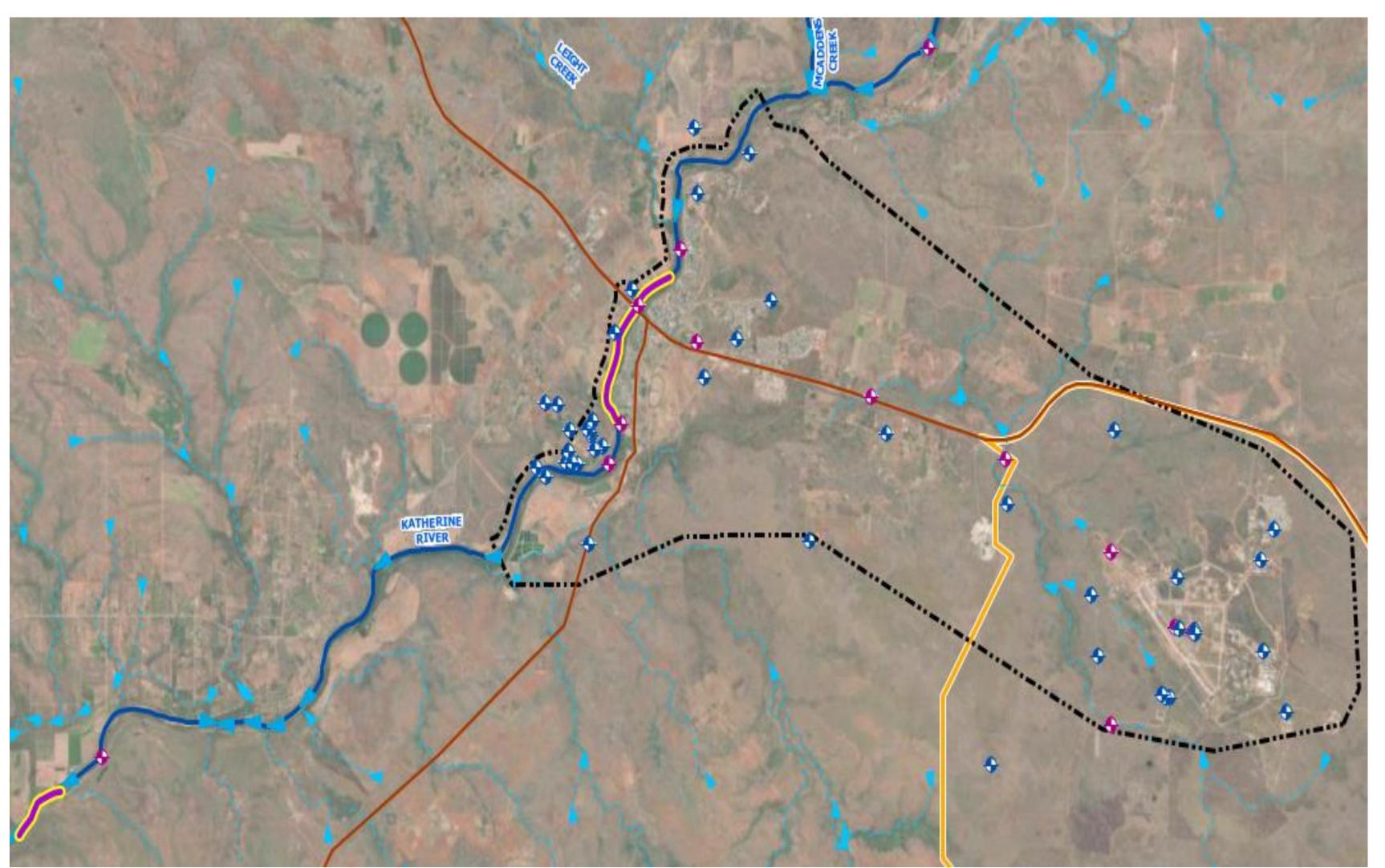
# RAAF Base Tindal – Ongoing Monitoring

### What is Ongoing Monitoring?

Defence undertakes regular monitoring as part of the Ongoing Monitoring Program.

This regular sampling helps Defence understand any changes in PFAS by regularly sampling groundwater, surface water and aquatic biota (fish, shellfish and crustaceans) at locations around Katherine.

The Results are published in an Ongoing Monitoring Interpretive Report.



### Monitoring

538 samples collected from 63 locations (Apr 2021 – Jun 2023)

#### Groundwater

342 Samplescollected from34 locations

#### Surfacewater

91 Samples collected from 23 locations

### **Aquatic Biota**

105 Samplescollected from6 locations

Recent key findings

#### **Human Health Risk**

- No Significant changes.
- Recent detections in the Cossack area are continuing to be investigated.
- Continue following NT Health advice on consumption of aquatic biota from Katherine River.

#### Groundwater

- Highest concentrations at or near known source areas.
- PFAS concentrations are seasonally influenced. Higher during the late wet season and lower concentrations during the dry season.

#### **Surface Water**

- Public swimming areas continue to be monitored.
- PFAS remains below health based guidance values for recreational water use.
- PFAS concentrations are also seasonally influenced.

# RAAF Base Tindal – What's to come



- Update the community
- Publish the next Interpretive Report

- Complete soil remediation late 2023
- On-base water treatments plants continue operation
- Progress new, permanent water treatment plant with PowerWater





Monthly wet season sampling starts
November 2023.



- Continue monitoring any changes in PFAS contamination in the Cossack area and supporting residents
- Continue to provide sampling results to residents.

