Katherine Water Treatment Plant

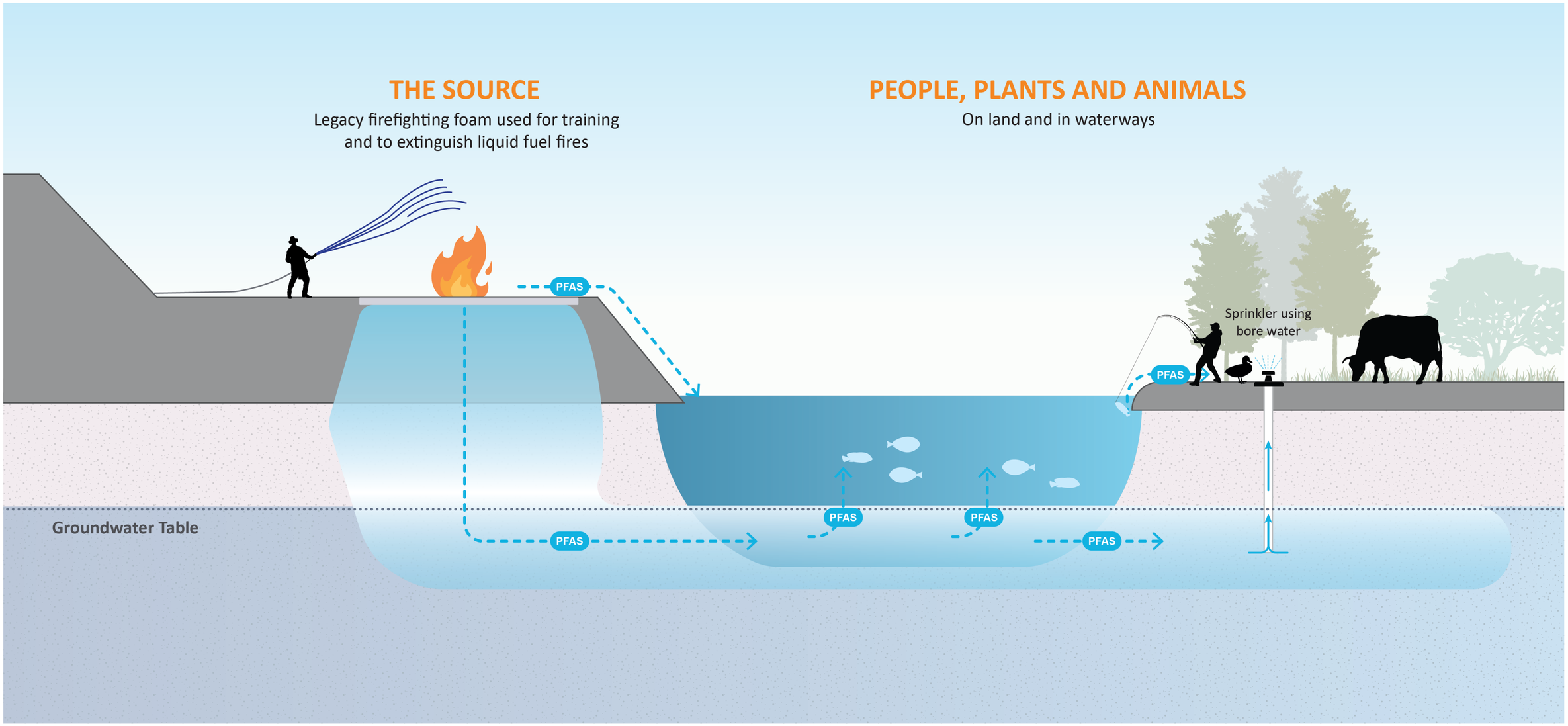
A Defence funded water treatment plant was commissioned in Katherine in May 2024.

The new water treatment plant can treat up to 10 million litres of water per day, and replaces the temporary plant Defence provided in 2017.

This plant operates in addition to the existing 10 mega litres-per-day surface water treatment plant. The plants secure a long term water supply for the Katherine community.

The facility is now managed and operated by the Northern Territory Power and Water Corporation.

How does PFAS move in the environment?



Historically, PFAS were used extensively worldwide in firefighting foams, including on Defence bases.

PFAS moves easily in the environment through surface water and via soil into groundwater.

PFAS can accumulate in the environment over time.

Soil remediation at RAAF Base Tindal

The purpose of remediation is to reduce PFAS leaving the base

- Main PFAS source areas are the fire training area and fire station area.
- Remedial works at these source areas involves soil and groundwater remediation techniques.
- Over time, remediation actions will reduce the amount of PFAS moving off the base and into the surrounding environment.
- Soil remediation at the fire station area was completed in November 2023.
- Soil remediation at the fire training area is due to be completed in late 2024.

Soil stabilisation was used at RAAF Base Tindal, this involves:

- Treating PFAS-impacted soil with activated carbon.
- PFAS binds to the carbon, limiting its movement in the soil.
- The treated soil is returned and covered with a capping layer and clean topsoil to prevent erosion and minimise exposure to rainwater.

Soils with PFAS concentrations too high to treat effectively are sent for treatment at a thermal destruction facility.

While it is not possible to remove all PFAS from the environment, **65,000 tonnes** of PFAS impacted soil has been treated **since 2022**.

Soil remediation underway at the fire station area

Program timeline

2016 - 2019
Site investigations and PFAS management area plan published

2017
Temporary Katherine PFAS treatment plant commissioned

2019
Two groundwater treatment plants commissioned on base

2019
Ongoing monitoring commenced

2020 - 2023
Remediation action plan completed. Remediation contractors engaged

2022
Soil remediation commences at fire training area and fire station area

2022 - 2024
PFAS movement assessment (further site analysis)

November 2023
Soil remediation completed at fire station area

May 2024
Permanent Katherine water treatment plant commissioned

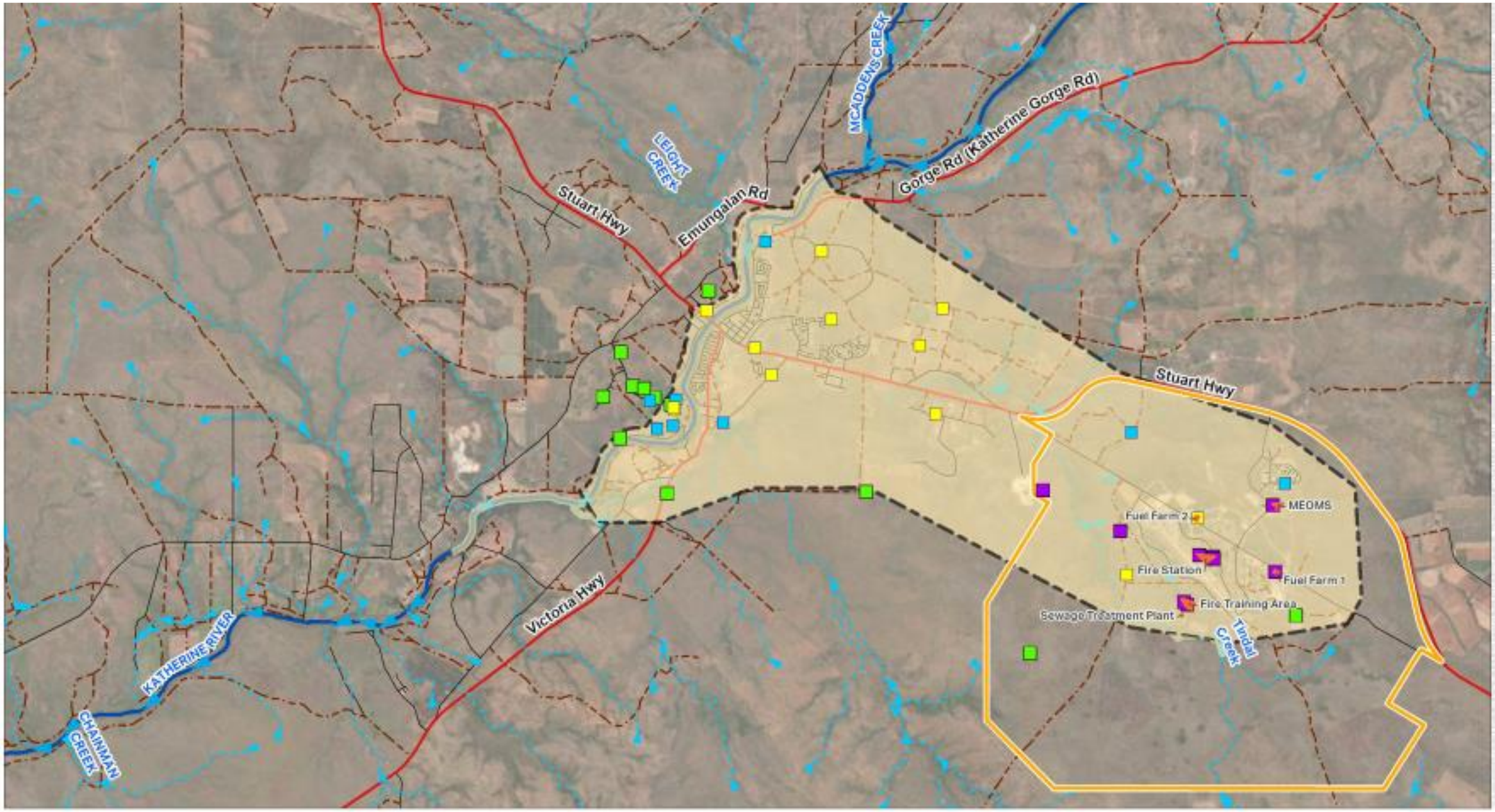
October 2024
Revision of PFAS management area plan and ongoing monitoring plan

Late 2024
Soil remediation completed at fire training area

Ongoing
Ongoing monitoring and reporting, and implementation of long term management plan.

WE ARE HERE

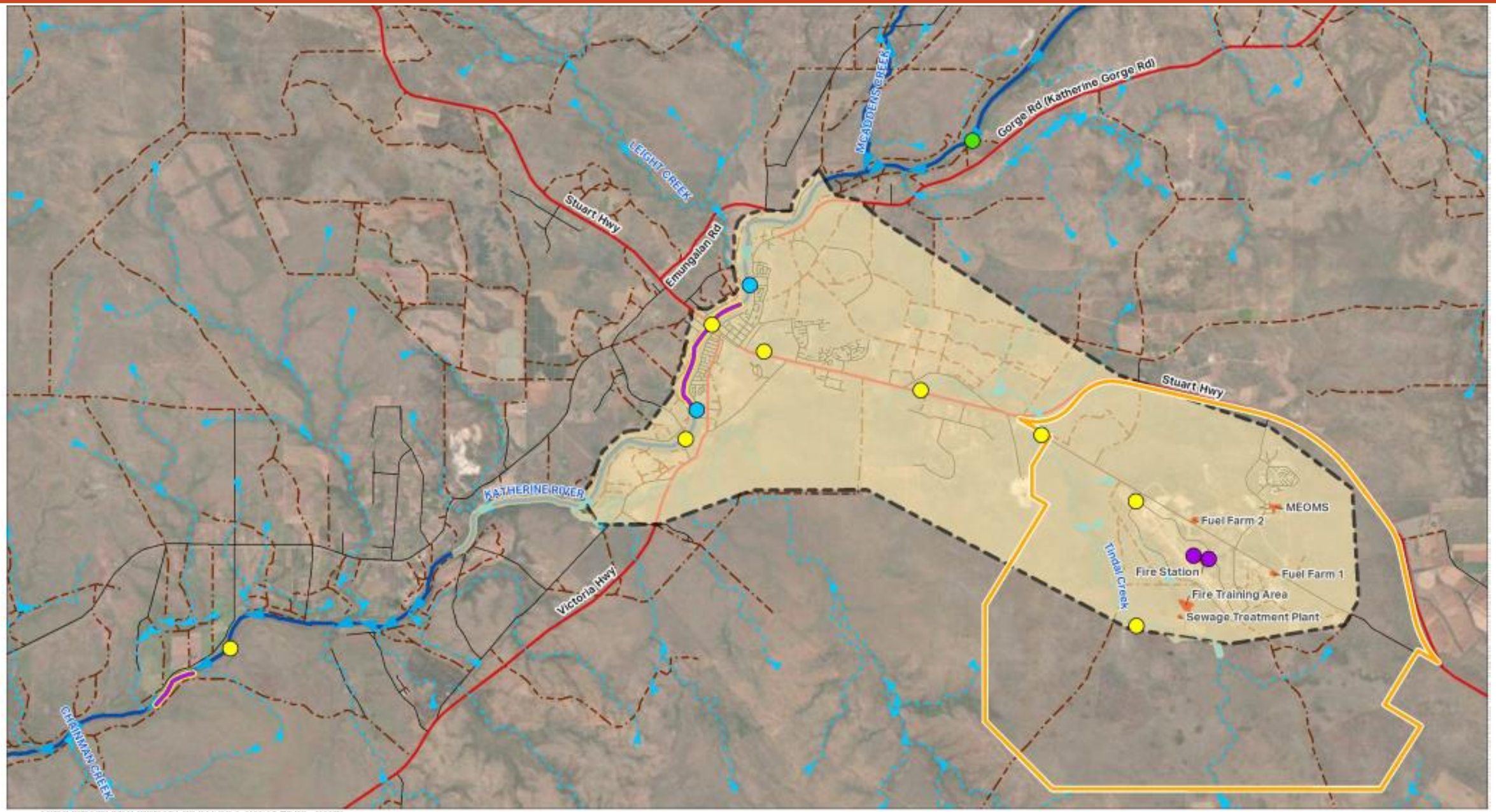
RAAF Base Tindal - groundwater sampling results



Legend

- PFAS not detected
- Detected below drinking water guideline
- Detected above drinking water guideline but below recreational guideline
- Detected above recreational guideline
- RAAF Base Tindal
- RAAF Base Tindal Management Area
- Source Areas
- Highway
- Road
- Katherine River
- Drainage

RAAF Base Tindal - surface water sampling results

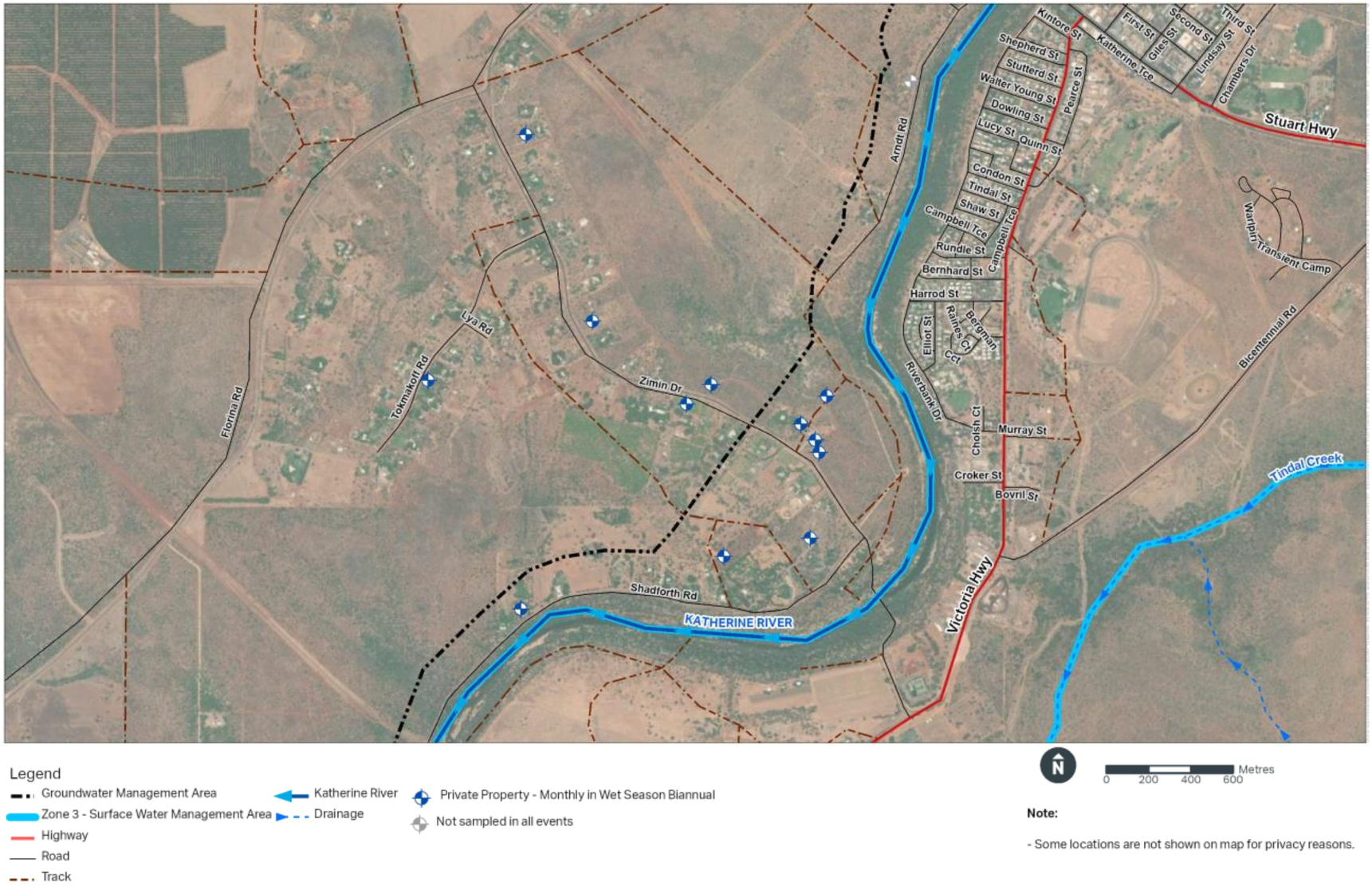


Legend

- PFAS not detected
- Detected below drinking water guideline
- Detected above drinking water guideline but below recreational guideline
- Detected above recreational guideline
- RAAF Base Tindal
- RAAF Base Tindal Management Area
- Source Areas
- Highway
- Road
- Track
- Katherine River
- Drainage
- Biota Sampling Locations

Cossack Area Update

- Defence has been monitoring PFAS movements within the Cossack area in response to first time detections of PFAS or detections above health-based guideline values.
- Defence is continuing to monitor PFAS movements within the Cossack area and west of Katherine River.
- Additional monitoring of this area will be undertaken as part of the ongoing monitoring program.
- Defence will continue to support residents in the Cossack area.



Australian Government
Defence

PFAS INVESTIGATION AND MANAGEMENT PROGRAM

SERVICE
COURAGE
RESPECT
INTEGRITY
EXCELLENCE

RAAF Base Tindal – latest ongoing monitoring findings

Ongoing monitoring is an important part of PFAS management and involves periodic sampling of groundwater, surface water and aquatic biota (water-based plants and animals).

The findings from the latest sampling results **do not** suggest a change in any potential exposure risks for the community.

Groundwater is seasonally influenced, and concentrations suggest movement of the PFAS plume westward of the base.

Residents should continue to follow NT Health's precautionary advice for fish, shellfish and crustaceans from the Katherine River and Tindal Creek.

Defence is continuing to monitor PFAS levels within the Cossack area and west of Katherine River.

Further monitoring of this area will be undertaken as part of the ongoing monitoring program.

Once finalised, the revised PFAS management area plan and ongoing monitoring plan will be available to view on the Defence website.

Next steps

Implement actions from the updated the PFAS management area plan and ongoing monitoring plan

Complete soil remediation at the fire training area in late 2024

Continue monitoring in the Cossack area

Ongoing monitoring and reporting

Review of the PFAS management area plan and ongoing monitoring plan

Defence is revising the PFAS management area plan and updating the ongoing monitoring plan to ensure that Defence continues to manage the latest risks identified from recent sampling results.

Proposed changes include:

- additional on-base groundwater sampling locations to track predicted reductions in PFAS where soil remediation was completed
- additional groundwater sampling locations north of the PFAS plume within Katherine to confirm PFAS is not moving towards additional communities to the north
- expansion of wet season sampling at all groundwater locations to capture both wet and dry season PFAS concentration changes.