

Defence

# **RAAF Base Townsville timeline of program**



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







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# **RAAF Base Townsville Management Area and source areas**

#### Legend

Base boundary / Management Area
Monitoring area
Source area

Fuel Farm 2 and Fire Station

Sub-Management

Area 2

ST JOHN

Sub-Management Area

Large areas including aviation aprons and hangers

# **PFAS INVESTIGATION AND** MANAGEMENT PROGRAM

**Three Mile Creek** Catchment

Rowes Bay

BELGIAN

GARDENS

WEST END

ROWES BAY

**Mundy Creek** Catchment

Sub-Management

**Former Fire Training Ground** 

GARBUTT

### **Source areas**

- required.

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

SERVICE COURAGE

RESPECT INTEGRITY EXCELLENCE

Three PFAS source areas were identified at RAAF Base Townsville in December 2019.

Two potential PFAS source areas were identified in the June 2023 Mass Flux Assessment. These areas will be investigated further to determine if remediation actions are

PFAS is transported off-base through groundwater and surface water (drains and creeks).

Surface water monitoring focusses on three catchments: Bohle River/Louisa Creek/Town Common, Three Mile Creek and Mundy Creek.



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# **RAAF Base Townsville - Soil remediation at the Former Fire Training Ground**





7500 m<sup>3</sup> of soil excavated for treatment, or destruction off base.

Action

#### **Soil stabilisation prevents PFAS** from moving, and is:

- $\checkmark$  a suitable treatment for moderate to low level PFAS contaminated soil
- $\checkmark$  a more sustainable option.

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Drainage remediation, soil compaction and 'guard trenches' reducing PFAS migration

Outcome

#### **Contaminated soils with very high** concentrations of PFAS were:

✓ removed from the base ✓ destroyed at a licensed facility in Victoria by a high temperature treatment process.

#### **Drainage remediation, soil** compaction and guard trenches:



**PFAS** migration from this source area reduced to the extent practicable.

 $\checkmark$  reduce rain water infiltration and PFAS migration from the soil into the drainage system and surrounding environment.



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# **RAAF Base Townsville – Recent ongoing monitoring sampling results**



# **PFAS INVESTIGATION AND MANAGEMENT PROGRAM**



### Results of groundwater samples collected in April 2023

Green represents results where PFAS was not detected in groundwater. Yellow is below drinking water guidelines. Orange is below recreational water guidelines Maroon and purple exceed both drinking water and recreational guidelines.

### Sampling key findings

No change to overall extent of PFAS plume, or to human health risk.
Groundwater results stable or decreasing.

Isolated increases at some surface water and groundwater locations, mostly within expected range.
Decreasing results near Former Fire Training Ground following remediation works.

• Seasonal variability in surface water results (higher after wet season).



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# **RAAF Base Townsville – Groundwater monitoring locations**



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# **RAAF Base Townsville – Surface water monitoring locations**



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