



RAAF Base East Sale - PFAS Management Area Plan & Ongoing Monitoring

PFAS Investigation and Management Program

About the Investigation

In May 2016, Defence commenced a detailed environmental investigation to identify the nature and extent of per- and poly-fluoroalkyl substances (PFAS) on, and in the vicinity of, RAAF Base East Sale.

The reports from the investigation were developed in consultation with the EPA Victoria, other Victorian Government agencies and the independent Environmental Site Auditor, to assist in developing management measures.

This detailed environmental investigation at RAAF Base East Sale has now been completed and the outcomes from the investigation have been used to develop the PFAS Management Area Plan (PMAP).

PFAS Management Area Plan

The aim of the PMAP is to provide options to manage and reduce the risks of PFAS exposure as a result of Defence activities. The PMAP will further guide Defence's actions to manage known sources of contamination, reduce PFAS migration, and manage identified exposure risks to the community or environment.

The PMAP is available at:

www.defence.gov.au/environment/PFAS/EastSale/publications.asp

PMAP Development

The development of the PMAP involved a review of the key PFAS source areas, migration pathways, and a range of available management options which were then compared and evaluated to identify possible options for the site.

The benefits of the potential management options were then compared against the possible reduction in PFAS exposure via the identified pathways. Based on this evaluation, recommendations were made on possible management responses.

PMAP Considerations

The investigation identified that the main pathway for off-site exposure to PFAS is likely to be the surface water drainage network. In addition, the migration of PFAS off-site is likely to also occur from the PFAS impacted soil at the key source areas on-site, and shallow groundwater seepage from the southeast corner of the Base.

The PMAP identified it would not be beneficial to manage the individual source areas in isolation due to the multiple PFAS sources and pathways that are contributing to the potentially elevated exposure risks. This is shown in the PFAS Conceptual Site Model overleaf.

To be effective in reducing off-site exposure risks, a combined drainage management response across the Base may be required. This could include:

- management of soil source areas by capping or excavating soil and storing it on-base,
- improvements to the drainage line controls,
- publicise precautionary advisories from other agencies (see current PFAS management below), and/or
- shallow groundwater management in southeast corner.

However, the PMAP identified that the above options may only result in a marginal to moderate risk reduction benefit. Therefore, further detail is required to determine the most effective approach in reducing exposure risks. This may include the following process:

- Conducting a monitoring and assessment program to better understand the contribution of PFAS migrating off-base from key source areas.
- Discharge and drainage improvement feasibility study.
- Implementing preferred option where net-benefit can be demonstrated.
- Re-assessing PMAP options for individual source area contributions when additional data and technology is available.

The PMAP will be reviewed every 12 months or when new technology is available.

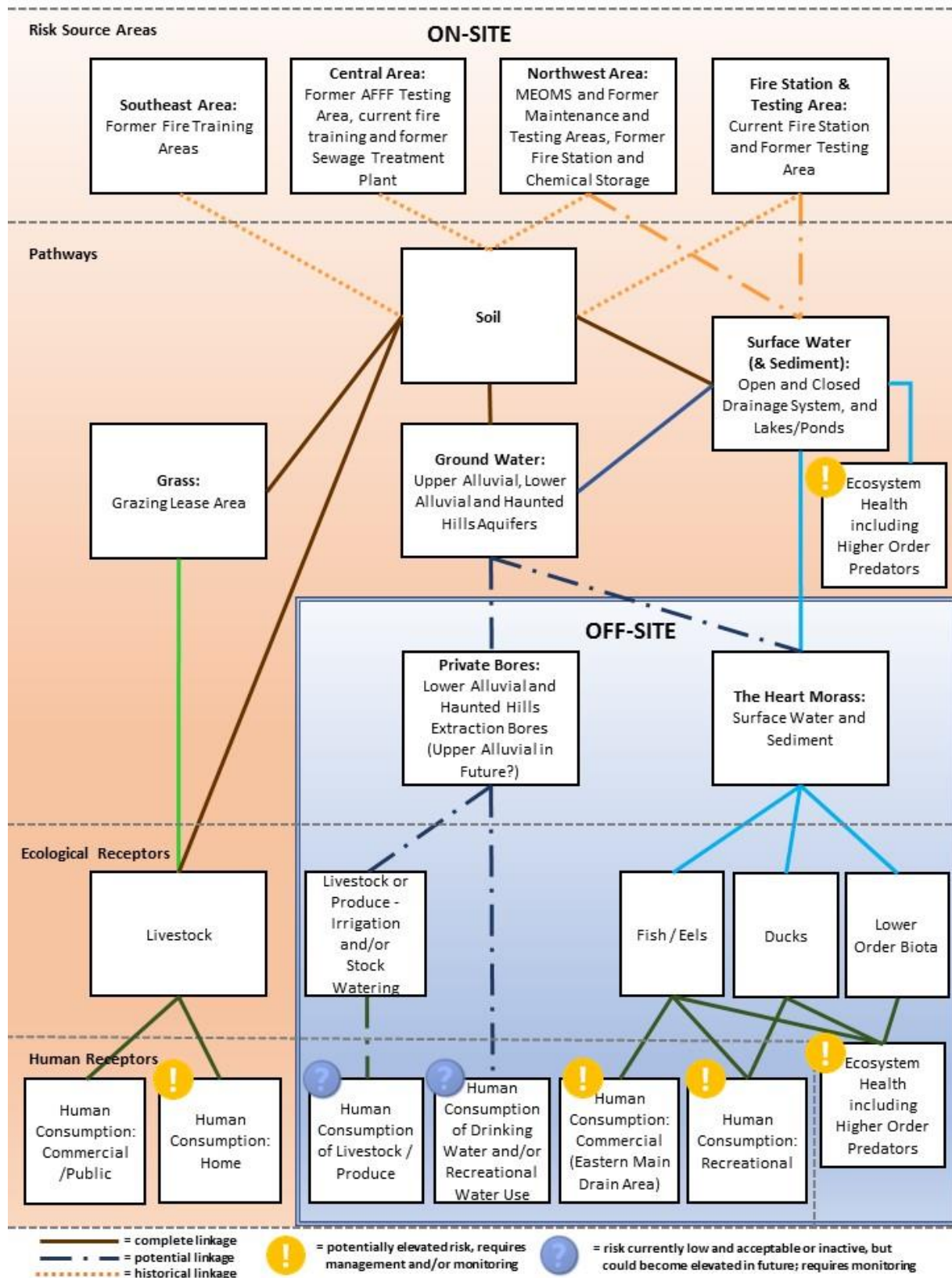




RAAF Base East Sale - PFAS Management Area Plan & Ongoing Monitoring

PFAS Investigation and Management Program

RAAF Base East Sale – PFAS Conceptual Site Model





RAAF Base East Sale - PFAS Management Area Plan & Ongoing Monitoring

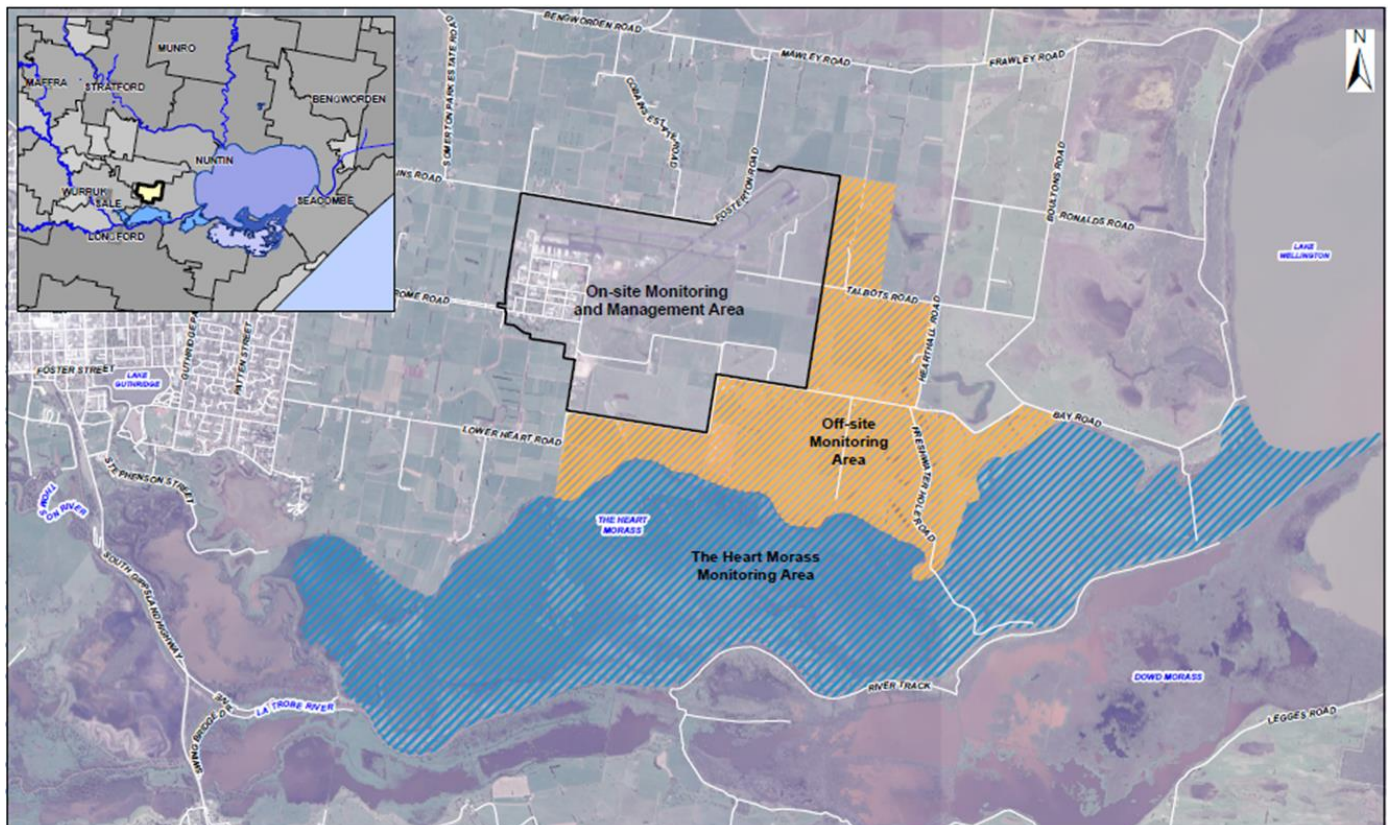
PFAS Investigation and Management Program

PFAS Ongoing Monitoring Plan

The implementation of the PMAP includes an Ongoing Monitoring Plan (OMP) to continue to monitor and assess potential changes or trends in the nature and extent of PFAS impacts and/or exposure risks on and off-base as a precautionary measure.

The OMP will involve the sampling of groundwater, surface water and sediment at monitoring areas which are located primarily on-base, at private properties to the south and southeast, and The Heart Morass wetlands. Ongoing reporting of results will be provided to EPA Victoria, with a review of the risk assessment to be completed where significant changes in conditions are identified.

Data collected will also be used to support the ongoing evaluation of management responses outlined in the PMAP. Additional investigation or monitoring to assess potential management options will be outlined in separate documentation to the OMP.



The Ongoing Monitoring Plan will assess potential changes to the nature and extent of PFAS impacts and/or risks on and off-base.

What	Where	When
Groundwater, surface water and sediment	Primarily on-base, at private properties to the south and southeast, and The Heart Morass wetlands	Quarterly sampling for 12 months, followed by a review.





RAAF Base East Sale - PFAS Management Area Plan & Ongoing Monitoring

PFAS Investigation and Management Program



WE
ARE
HERE

Current PFAS Management Actions

Defence is committed to the ongoing management of PFAS to reduce the movement of, and potential exposure to, PFAS.

From 2004, Defence commenced phasing out its use of legacy firefighting foams containing specific PFAS compounds, perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) as active ingredients. Defence now uses a product called Ansulite that does not contain PFOS and PFOA as active ingredients, only in trace amounts.

Defence uses foam products, in emergency situations where human life is at risk, or in controlled environments to test equipment. When conducting training exercises, Defence uses training foams which do not contain PFAS, or undertakes simulations without foam discharge. Any Ansulite used for testing is captured and treated and/or disposed of at licensed waste disposal facilities.

PFAS is further managed through the implementation of national PFAS environmental guidance used Defence-

wide during operations and construction activities such as airfield upgrades.

While advisories are in place from state based government agencies, Defence will work collaboratively with the Environment Protection Authority (EPA) Victoria to publicise these, as well as update EPA on any changes to the understanding of the nature and extent of PFAS impacts and potentially elevated risks.

Keeping the community informed

The measured concentrations of PFAS identified during the investigations have been provided to property owners where sampling was completed.

Defence will continue to keep the community informed on the progress of the ongoing monitoring and the implementation of the PFAS Management Area Plan. As well as community information sessions, updates will be provided through the project website, factsheets and newsletters as new information becomes available.

Contact Information

RAAF Base East Sale Investigation Hotline

- Phone: 1800 365 414
- Email: PFASDefenceCoordination@golder.com.au
- Website: www.defence.gov.au/environment/pfas/eastsale/

Media enquiries should be directed to Defence Media on (02) 6127 1999 or media@defence.gov.au

Useful Links

Department of Health

- Phone 1800 941 1800
- Website www.health.gov.au/PFAS

Food Standards Australia and New Zealand (FSANZ)

- Website <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas.htm>

