Australian Government
Department of Defence

HMAS Albatross – Human Health and Ecological Risk Assessment Addendum Findings

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, HMAS Albatross as a result of the historical use of legacy firefighting foams at the Base.

The investigation will identify whether the use of these foams has resulted in exposure to people, animals and the environment, and will help develop strategies to minimise exposure, should these be required.

- Preliminary Site Investigation
  May to September 2016
- Community Water Use Survey
  2016-2017
- Community Walk-in Session
  October 2016
- Detailed Site Investigation (DSI) and Human Health and Ecological Risk Assessment (HHERA)
  September 2016 to November 2017
- DSI and HHERA Community Walk-in Session
  November 2017
- HHERA Addendum
  December 2016 to June 2018
- HHERA Addendum Community Walk-in Session
  June 2018

  WE ARE HERE
- PFAS Management Area Plan (PMAP)
  Third Quarter 2018

*Dates may be subject to rescheduling

Investigation update

In November 2017, the Detailed Site Investigation and Human Health and Ecological Risk Assessment reports were presented to the local community.

The Detailed Site Investigation involved sampling of soil, sediment, surface and ground water to collect information and better understand how PFAS moves through the environment.

The Human Health and Ecological Risk Assessment aimed to provide a better understanding of the potential for PFAS exposure to people, plants and animals within the Investigation Area.

The Human Health and Ecological Risk Assessment recommended additional biota (fish and crustacean) sampling be conducted in the Shoalhaven River and Currambene Creek, as well as soil sampling in the Lowland Rainforest ecological community on the Base.

The Human Health and Ecological Risk Assessment Addendum has now been completed.
The Addendum Report is available to view at:
www.defence.gov.au/environment/pfas/Albatross/publications.asp

Sampling for the Addendum

The Addendum involved sampling and analysis of surface water, sediment and biota on HMAS Albatross and within the Shoalhaven River and Currambene Creek. Three locations were sampled on each waterbody, and samples of common edible fish species were collected from each. In Currambene Creek, a total of 48 samples were collected and in the Shoalhaven River, 31 samples were collected.

Species caught in each waterway are summarised in the table on the following page.

Waterway	Species Caught
Shoalhaven River	Australian bass Dusky flathead Eastern sea garfish Estuary perch Herring Luderick Mud crab Sand mullet Sea mullet Tailor Tiger mullet Yellowfin/Black bream
Currambene Creek	Blue swimmer crab Black sole Eastern sea garfish Estuary perch Freshwater prawn Luderick Mud crab Mulloway Sand whiting Sea mullet Silver trevally Yellowfin/Black bream

Summary of the Addendum findings

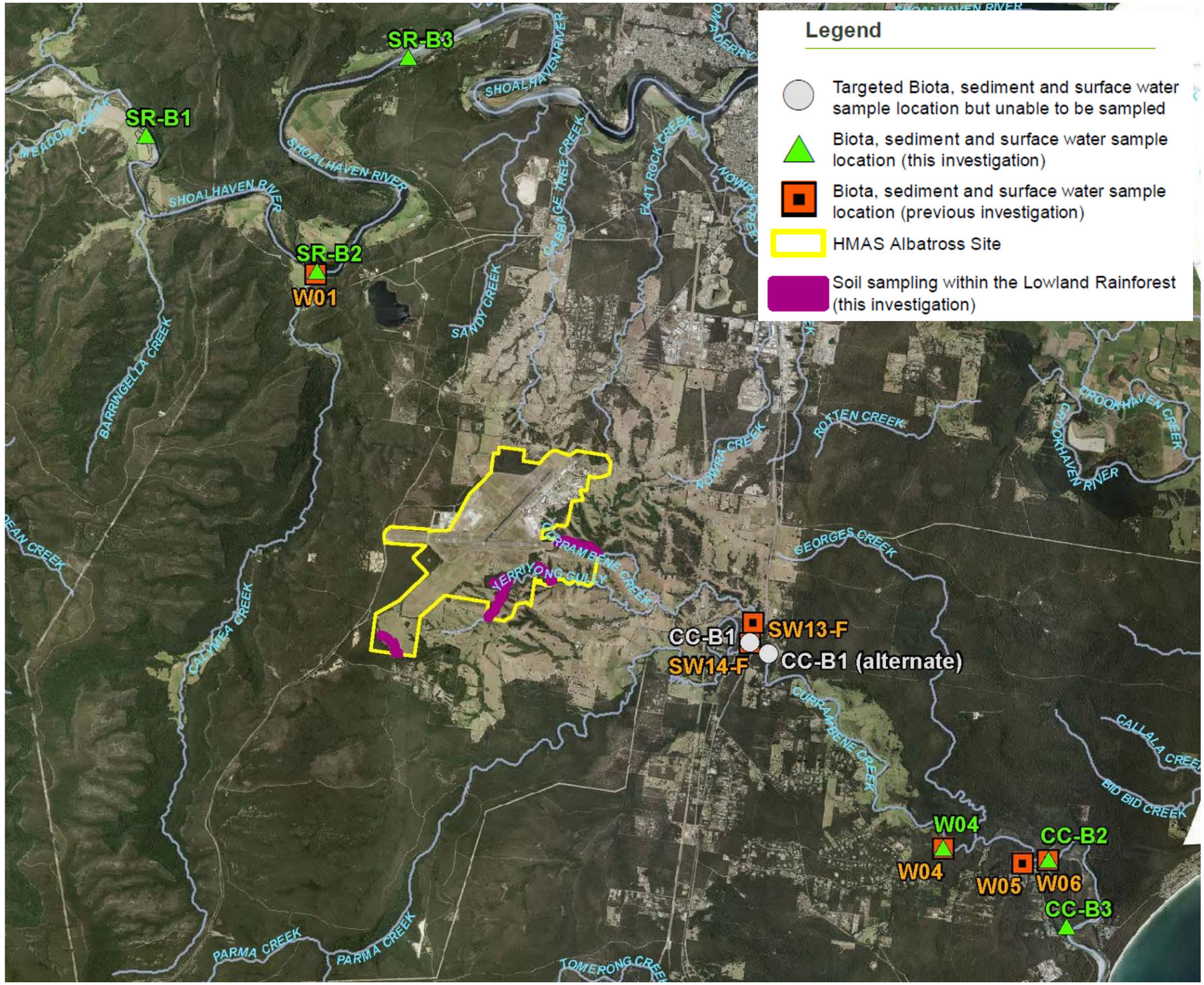
The HHERA Addendum also included a risk characterisation to summarise risks and uncertainties and assess the likelihood of effects occurring.

A risk assessment can tell us if there is:

- No risk
- Low and acceptable risk
- Approaching a potential risk
- Potential elevated risk

The phrase 'low and acceptable' refers to circumstances where the level of risk is calculated to be below the threshold where possible human health impacts may occur.

It is noted that surface water and groundwater are not currently used as a drinking/potable water source by residents or on base.



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Addendum Risk Assessment Summary

ERA	Activity	On-Site	Off-site
	***Terrestrial Ecosystems*** *(direct)*	✅	✅
	***Terrestrial Ecosystems*** *(insectivorous mammals)*	⚠	⚠
	***Aquatic Ecosystems*** *(direct)*	n/a	✅
	***Risks to higher order predators consuming aquatic plants and animals***	⚠	⚠

HHRA	Activity	On-Site	Off-site
	***Consumption of fish and crustaceans*** *(low and acceptable risk when dietary advice provided by NSW Government is followed)*	n/a	⚠

✅ *Low and acceptable risk*

⚠ *Potential for elevated exposures*

The HHERA Addendum report has been provided to relevant government agencies and regulatory bodies and is available on the HMAS Albatross investigation website.

Next steps

Defence is currently developing a PFAS Management Area Plan (PMAP) for HMAS Albatross.

The aim of the PMAP is to provide options to manage potential exposure risks identified within the environmental investigation. This will include an ongoing groundwater and surface water monitoring plan.

Further community engagement will occur upon completion of the PMAP.

Keeping the community informed

Defence will continue to keep the community informed on the outcomes of further sampling and the implementation of management plans. As well as community information sessions, updates will be provided through the project website, newsletters and factsheets as new information becomes available.

Useful Links

NSW Environment Protection Authority: http://www.epa.nsw.gov.au/MediaInformation/pfasinvestigation.htm

Food Standards Australia New Zealand's (FSANZ): http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas-hbgv.htm

Contact Information

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