

## Williamtown RAAF Base contamination - FAQs

These FAQs have been developed by the NSW Government agencies and are updated and revised frequently as new information is received. If you are looking for specific information in this document, please click one of the subject links below:

[Health-related questions](#)

[Fisheries-related questions](#)

[Water-related questions](#)

[Livestock & produce-related questions](#)

[NSW Government contact details & links](#)

### 1. What is being done in response to the contamination issue at Williamtown?

The NSW Government, including the Environment Protection Authority (EPA), NSW Health, the Department of Primary Industries (DPI), NSW Food Authority and Hunter Water are working with the Department of Defence to assess and confirm the nature of any potential risks caused by the contamination and to develop an appropriate response.

The NSW Government has established an Expert Panel led by the NSW Chief Scientist & Engineer, Mary O’Kane. Under the Chief Scientist and Engineer’s leadership, the EPA, NSW Health, the DPI, NSW Food Authority, Hunter Water and independent experts in hydrology and toxicology will assess and confirm the nature of any potential risk of the contamination and what has to happen next.

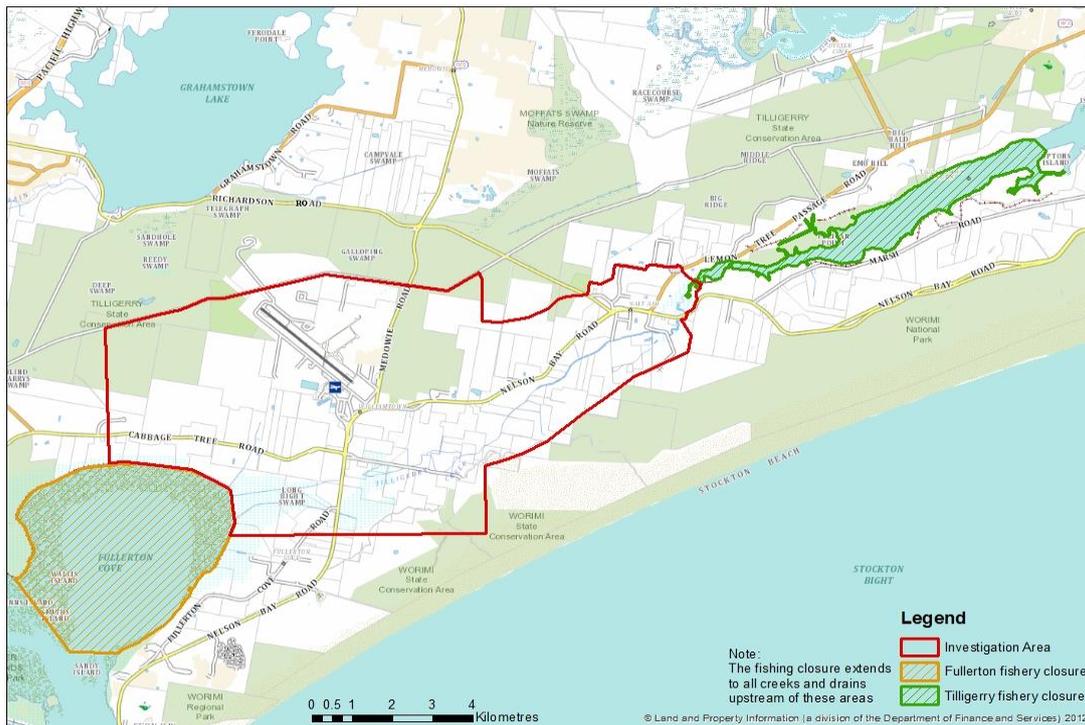
Parliamentary Secretary for the Hunter Scot MacDonald is overseeing the Community Reference Group which will act on behalf of the Williamtown community and formally engage with and provide input into the Expert Panel.

### 2. What are the chemicals involved?

Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) are substances that were historically used in fire-fighting foams. They were used at RAAF Williamtown in fire-fighting training and operations prior to a change in Defence policy.

### 3. What is the investigation area?

The below map (*updated 21 Oct 2015*) highlights the current area under investigation for potential groundwater contamination and the affected adjacent fisheries and oyster farms.



#### 4. Why was the investigation area extended on 8 October 2015?

On Thursday 8 October 2015, the Expert Panel met and reviewed new preliminary test results for surface water presented by the EPA. Based on the results, the Expert Panel resolved as a precautionary measure to extend the current investigation area from the RAAF base further towards the areas covered by the existing fishing bans.

The investigation area has been extended to the east, to include major surface water drains and creeks between the original investigation area and the Tilligerry Creek fisheries closure area.

The revised investigation area was determined through consultation between the EPA, Hunter Water, and DPI. This is based on surface water and ground water results, as well as surface water drainage patterns and groundwater flow directions in the region.

#### 5. What advice is being offered to residents in the area?

The NSW Government is advising residents in the investigation area to take precautions while further assessments are undertaken, including:

- not drinking or preparing food from private water bores, or water from dams, ponds, creeks or drains (*town water is safe*)
- not eating eggs from backyard chickens or drinking milk from cows and goats that have been drinking bore water or surface water in the area; and
- not eating fish, prawns or *wild* oysters caught in the nearby area.

A previous ban on eating harvested oysters was lifted after test results presented to the Expert Panel showed oysters from the Tilligerry Creek Harvest Area did not present a food safety risk.

NSW Government agencies will continue to assess the situation, undertake comprehensive health risk assessments and testing of bore and surface waters to update this advice.

## HEALTH FAQS

### 6. What are the potential health impacts from PFOS and PFOA?

Whether PFOS or PFOA causes adverse health effects in humans is currently unknown, but on current evidence, the potential for adverse health outcomes cannot be excluded. Studies of workers exposed to these chemicals have not consistently shown adverse health effects, though impact on blood cholesterol levels, thyroid function and liver size have been reported in some studies. Mothers exposed to high levels of PFOA in the drinking water did not have an increased risk of birth defects in their children.

Where there is not enough scientific evidence to assess health effects in humans, any effects in animals are then assessed. Certain laboratory experiments on rats have indicated some potential to promote cancer, but it is not clear if these results have implications for human health. For more information visit:

<http://www.health.nsw.gov.au/factsheets/Pages/RAAF-site-contamination-faq.aspx>

### 7. Is there a test to determine any health effects?

There is no test to determine if you are likely to have any health effects from exposure to PFOS and PFOA. Health check-ups are not recommended for people who may have been exposed to PFOS and PFOA, as there are no medical conditions that have been proven to be causally associated with PFOS and PFOA exposure in humans. For more information visit:

<http://www.health.nsw.gov.au/factsheets/Pages/RAAF-site-contamination-faq.aspx>

### 8. Is there a test to determine how much an individual is exposed to?

Yes, a blood test can determine an individual's cumulative exposure to PFOS and PFOA.

### 9. Do I need a blood test for PFOS and PFOA?

No. PFOS and PFOA blood testing does not help predict health effects.

There are blood tests available that can detect PFOS and PFOA in humans. However, the serum levels detected do not provide an interpretable measure of health risk for the individual tested, i.e. detecting a specific PFOS and PFOA level does not mean an adverse health effect will occur.

For more information visit:

<http://www.health.nsw.gov.au/factsheets/Pages/RAAF-site-contamination-faq.aspx>

### 10. Do mosquitoes spread PFOS/PFOA to people during biting?

Mosquitoes are not known to transmit any man-made chemicals during blood feeding. Mosquitoes are known to cause other health problems, however. More information can be found at:

<http://www.health.nsw.gov.au/Infectious/factsheets/Pages/Ross-River-Fever.aspx>

<http://www.health.nsw.gov.au/Infectious/factsheets/Pages/barmah-forest-virus.aspx>

**11. What do the blood test results mean in terms of health effects?**

At this stage, because of gaps in scientific knowledge, blood testing can provide no useful information about risk to an individual's health, assist with diagnosis or provide treatment information. In effect, the results are uninterpretable for a person tested, and provide no guidance about what advice to provide, treatment to offer or risks to expect.

Although blood tests have been used in some situations (mostly research) to indicate population exposure, the likely levels, duration of exposure and the small size of the population potentially affected limit its scientific and clinical value.

*For more health related information visit -*

<http://www.health.nsw.gov.au/factsheets/Pages/RAAF-site-contamination-faq.aspx>

## FISHERIES FAQs

**12. Is the contamination impacting on the town water supply?**

The contamination has not impacted on the town water supply. However, as a precautionary measure, an embargo on the operation of two bore stations in the Tomago sandbeds for water supply purposes has been implemented. These two bore stations are in close proximity to the RAAF base and therefore are at risk of being affected by contamination from the base.

**13. What are the affected fisheries?**

The Fullerton Cove and the upper Tilligerry Creek areas are closed for both commercial and recreational fishing until 30 June 2016. The precautionary ban on the sales of oysters from the commercial oyster farming area of upper Tilligerry Creek was lifted on 3 October 2015. This followed an assessment of results by the Expert Panel. Testing results showed that farmed oysters are safe to eat and not a health risk.

**14. Are fish and oysters being tested?**

DPI Fisheries and the NSW Food Authority are sampling prawns and fish for testing. Further sampling will occur to ensure that a wide range of commercial and recreational species, including crabs, are tested.

**15. When will test results be available?**

Testing and analysis of farmed oysters is complete. Preliminary sampling for fish, crabs and prawns is complete and test results for these species can be found here - <http://www.epa.nsw.gov.au/resources/epa/152670-preliminary-assessment-commercial-oysters-211015.pdf>

**16. How extensive is the second round of fish, prawn and crab sampling and when does it start?**

The second round of sampling has commenced for an expanded list of ten commercial and recreational species. Sampling sites include Fullerton Cove and upper Tilligerry Creek and eight other locations close to these areas that were identified by fishers as key harvest areas.

### **17. Can I go fishing in the affected waterways?**

No. Fullerton Cove and the upper Tilligerry Creek areas and all creeks and drains upstream of these areas are closed for both commercial and recreational fishing until 30 June 2016.

Temporary signs have been erected and DPI Fisheries officers are patrolling the waterways to further advise people of the precautionary closure.

### **18. How long will the affected waterways be closed?**

The precautionary closure for commercial and recreational fishing has been extended until 30 June 2016 for both Fullerton Cove and Tilligerry Creek. The Expert Panel will continue to review test results and advise on any changes to the closure.

### **19. Why has the precautionary fishing ban and advisory been extended to 30 June 2016?**

The NSW Government has accepted advice from the Expert Panel that a comprehensive Human Health Risk Assessment is necessary to determine the PFOS/PFOA exposure risk posed by individual food groups, as well as calculate the cumulative risk to someone who consumes several types of food on a daily basis.

A comprehensive Human Health Risk Assessment therefore requires that a large range of samples are tested, including fish, water, meat, dairy, eggs, fruit and vegetables, honey and other crops. The Expert Panel took into account the extensive testing required and that very few laboratories have the capacity to perform advanced testing for PFOS/PFOA.

Until the risk assessment is completed by the Department of Defence, precautionary advice is as follows:

The NSW Government is advising residents in the investigation area to take precautions while further assessments are undertaken, including:

- not drinking or preparing food from private water bores, or water from dams, ponds, creeks or drains (*town water is safe*)
- not eating eggs from backyard chickens or milk from cows and goats that have been drinking bore water or surface water in the area; and
- not eating fish, prawns or *wild* oysters caught in the nearby area.

A previous ban on eating harvested oysters was lifted after test results presented to the Expert Panel showed oysters from the Tilligerry Creek Harvest Area did not present a food safety risk.

NSW Government agencies will continue to assess the situation, undertake comprehensive health risk assessments and testing of bore and surface waters to update this advice.

- 20. Can I eat fish, prawns or *wild* oysters I have caught from the affected waterways?**  
No. As a precautionary measure, the affected waterways of Fullerton Cove and the upper Tilligerry Creek areas and all creeks and drains upstream of these areas, are closed for both commercial and recreational fishing.

## WATER FAQs

- 21. Can I safely drink water from my bore?**  
No. As a precautionary measure, the NSW Government is advising people not to drink or prepare food from private water bores, or water from dams, ponds, creeks or drains (town water is safe).
- 22. Can I swim in or use water for creeks, dams, ponds or drains?**  
Within the revised investigation area, residents are advised to take precautions while further assessments are undertaken, including not drinking or preparing food from private water bores, or water from dams, ponds, creeks or drains. Town water is safe.

Swimming in water from private water bores, or water from dams, ponds, creeks or drains poses a potential exposure risk if it is swallowed. Small children and infants have a tendency to take larger gulps of water, therefore the NSW Government is advising small children and infants not to swim in water from private water bores, or water from dams, ponds, creeks or drains.

- 23. Is the Government conducting further testing of bores?**  
Yes – a number of State Government agencies and the Department of Defence are conducting further testing of ground water bores and surface waters in the area. Those results will be provided to the Expert Panel, who will assess them and provide further advice to residents.
- 24. What will the Government do with the information it collects on bore water use?**  
Information is being collected by the Department of Defence for the purpose of investigating potential groundwater contamination and understanding groundwater use patterns in the investigation area. This information is not being collected for regulatory or billing purposes, and will not be provided to DPI - Water beyond the extent required to enable the provision of expert advice to assist with the management and response to relevant groundwater contamination concerns.

Information collected by State Government agencies will be provided to the Expert Panel for assessment and results made publicly available once assessed.

- 25. How do I get my bore tested?**  
If you use your bore for drinking water and you live within the investigation area, please complete the water usage survey on the Department of Defence website – <http://www.defence.gov.au/id/Williamtown/> or contact the Department of Defence on **1800 011 443**.

**26. Will I be charged a licence or administration fee for my groundwater bore if I ask for testing?**

Investigations (testing) of licenced and unlicenced bores by the Department of Defence and their consultants through the water usage survey is not being undertaken for regulatory or billing purposes, and will not be provided to the DPI Water, beyond the extent required to enable the provision of expert advice to assist with the management and response to relevant groundwater contamination concerns.

DPI Water is responsible for licencing and approvals associated with private groundwater bores and extraction of water (this is not the responsibility of Port Stephens Council). All bores (including those accessing a basic landholder right for domestic and stock purpose) are required to have an approval under the Water Management Act 2000. Extraction of water is required to be licenced under this same Act, if it is for purposes other than access to a basic landholder right for domestic and stock use.

It is advised that land holders ensure they have correct approvals in place for all bores, and where applicable, licences for the extraction of water, should it be used for purposes other than domestic and stock. Registering your bore assists us to manage the groundwater, and in situations, such as this, enable relevant information to be provided to owners in a timely manner. The cost of a basic landholder rights bore application is currently \$241.83. Please contact DPI Water should you have any specific questions in regards to licencing and approval requirements for groundwater bores on **1800 353 104**.

**27. What if I don't have access to the town water supply?**

If you don't have a town water supply connection and you rely solely on bore, please contact the Department of Defence on **1800 011 443**.

**28. What if I am not sure if my water is bore or town supply?**

If you are unsure about whether or not you are connected to the town water supply, please contact Hunter Water on **1300 657 657**.

## **LIVESTOCK & PRODUCE FAQs**

**29. Can I water my fruit and vegetables using water from my bore, creek or dam?**

In keeping with advice provided by the NSW Ministry of Health, consuming fruit and vegetables watered with bore or other water in this area is unlikely to present a significant health risk. This is because fruit and vegetables accumulate less of these contaminants than seafood, shellfish and eggs from backyard chickens or milk from cows and goats that may graze or have been drinking in the area. A wide variety of food types, including fruit and vegetables, will be analysed as part of the comprehensive Human Health Risk Assessment.

**30. Will my animals be harmed by drinking water from my bore, creek or dam?**

Based on similar contamination issues in other states, there are no proven adverse animal welfare effects. However, as a precaution, if you have an alternative water supply, then this should be used.

There are many causes of ill thrift and ill health in animals. If your animal is unwell, you should ask your veterinarian to investigate.

When animals are sick, disease diagnosis can be complex. A full veterinary investigation will assist to eliminate potential diagnostic options and test for specific diseases. Despite this, sometimes no specific cause of illness and death can be identified. This is not unusual.

**31. Should I drink milk from cows or goats that are drinking water from my bore, creek or dam or grazing in the area?**

As a precaution, NSW Health advises that milk from cows and goats that may graze or have been drinking bore water in the investigation area should not be consumed by humans.

**32. Is it safe to eat meat from animals that have been drinking water from my bore, creek or dam from within the affected area over many years?**

Yes. It is safe to eat meat from animals from the investigation area.

**33. Can I sell my agricultural livestock?**

Yes. There are no movement restrictions or quarantines imposed on livestock from the investigation area.

**34. Can I eat eggs from poultry that are drinking water from my bore, creek or dam?**

As a precaution, NSW Health advises that eggs from backyard poultry in the investigation area should not be consumed by humans.

**35. How do I dispose of eggs or milk that are sourced from within the Investigation Area?**

The precautionary advice to not consume eggs or milk from the investigation area remains in place while a comprehensive Human Health Risk Assessment is completed. It is recommended that eggs and milk are disposed of through your usual general waste bins (these bins have a red lid in the Port Stephens Council area).

**36. Are there any commercial dairy or egg production facilities in the area?**

There are no commercial dairy, meat chicken or egg producers within the investigation area.

## CONTACT DETAILS & LINKS

### Where should I go for further information?

- [Department of Defence and NSW Government investigating chemicals around Williamtown RAAF Base](#)
- [NSW EPA information and advice](#)
- Information on what NSW DPI is doing and [Information for water users and primary industries](#)
- NSW Health Fact Sheet: [PFOS and PFOA – Williamtown RAAF Site Contamination](#)
- Department of Primary Industries Fact sheet: [Williamtown RAAF Base Contamination](#) (PDF 279KB)

### Who should I call if I have concerns?

For more information, please contact:

- NSW Department of Defence on **1800 011 443**
- NSW Environment Line on **131 555**
- NSW Food Authority Helpline on **1300 552 406**

For specific health inquiries, call **1300 066 055**

For more information on fishery closures, call **4982 1232**