

Fishing in the Katherine region

In March 2017, the Australian Department of Defence (Defence) commenced a detailed environmental investigation to identify the extent of per- and poly-fluoroalkyl substances (PFAS) contamination emanating from firefighting foams historically used at RAAF Base Tindal.

There is no consistent evidence of human health effects related to PFAS exposure; however the possibility cannot be excluded. As a result the NT Government is taking a cautionary approach to safeguard the health of Territorians.

The Defence investigation includes the testing of water and soil samples and a range of flora and fauna including fish, crustaceans and other aquatic species.

This detailed investigation forms part of a Human Health Risk Assessment (HHRA) and Ecological Risk Assessment to assess the potential risks of human exposure to PFAS.

As part of this process, Defence has developed an interim HHRA, which was released in January 2018. It has identified levels of PFAS in fish, shellfish and cherabin caught in Tindal Creek and the Katherine River downstream of the Stuart Highway.

There are no conclusive results available yet to provide definitive advice on the consumption of fish and other aquatic species.

As a result, the NT Department of Health as a precautionary measure is recommending that people avoid eating fish, shellfish and cherabin from the Katherine River and Tindal Creek. This action is purely a precaution as we wait for further wet season sampling results and the release of the final HHRA by Defence in April 2018.

The final report will include a further wet season aquatic species sampling program, as well as results from community food surveys being undertaken by Coffey (the environmental consultant for Defence).

Signage has been erected along the Katherine River and Tindal Creek to caution against eating fish, and aquatic species until the final report results are known.

The NT Department of Health will be in a better position to provide advice on safe levels of consumption of fish from Tindal Creek and the Katherine River and surrounding areas once the results of the final HHRA are known.

It should also be noted, that there is no commercial fishing in the Katherine region. The nearest commercial fishing operation is over 250km away.

Katherine River

Why are we being advised not to eat fish and aquatic species from Tindal Creek and Katherine River, downstream from the Stuart Highway?

The concern relates to frequent consumption of aquatic species taken from the river.

There are no conclusive results available yet. As a precautionary measure, the NT Department of Health has recommended that people avoid eating fish, shellfish and cherabin from the Katherine River and Tindal Creek.

The NT Department of Health will be in a better position to provide advice on safe levels of consumption of various aquatic species from these waterways once the results of the final HHRA are known.

How will visitors and locals know about the health warning not to eat fish from this area?

Signage has been erected along the Katherine River and Tindal Creek in the affected areas to directly inform people.

Information and fact sheets will be made available around Katherine in service stations, the visitor centre and in tackle shops.

What about fish caught for commercial purposes?

There is no commercial fishing in the Katherine area.

Will this impact my visit to the Katherine region?

This will have no impact on visitors. The region has a variety of attractions for visitors and locals to enjoy, including gorges and waterfalls, thermal springs and ancient cultural experiences. Visitors can go on self-drive adventures or fishing, camping, kayaking and trekking.

Will I be able to eat fish from Tindal Creek and the Katherine River again?

It must be stressed that this is purely a precautionary measure as we await further wet season sampling results and the release of the final Human Health Risk Assessment by Defence in April 2018.

The NT Department of Health will be in a better position to provide advice on safe levels of consumption of various aquatic species from Tindal Creek and the Katherine River once the results of the final HHRA are known.

Does it apply to turtles as well?

Results received from Defence focused on fish, shellfish and cherabin, so there are no results available for turtles or other aquatic species.

People looking to limit their exposure to PFAS should consider avoiding consumption of aquatic species from the affected area in the Katherine River and Tindal Creek. This is just as a precaution to limit potential exposure to PFAS as there is no conclusive evidence available yet about potential PFAS levels in various fish species and other aquatic species.

Coffey are currently seeking ethics approval for testing of a number of other aquatic species.

How long will this arrangement be in place?

The NT Department of Health advice will remain in place until more information is available from the final Defence report in April 2018.

What is the risk if someone inadvertently eats fish from the river?

There is no consistent evidence of human health effects related to PFAS exposure; however the possibility cannot be excluded. As a result the NT Government is taking a cautionary approach to safeguard the health of Territorians.

The potential risk increases if fish and aquatic species are frequently consumed. The risk to tourists and visitors who may occasionally eat fish from the affected area of the river is considered to be very low.

What about the migration of fish downstream from the Katherine River?

There is limited information available about the impact of PFAS on fish once they move from water containing PFAS to other waterways.

The NT Government has collected a small number of fish samples downstream from the Daly River for initial PFAS testing.

Food Standards Australia and New Zealand (FSANZ) have reviewed results for the fish samples caught in the Daly River and analysed this data against the national Health Based Guidance Values (HBGVs), the report was provided in late December 2017. This initial analysis is based on a small number of samples.

The report found that consumption of barramundi, catfish and mullet species caught in the Daly River are unlikely to present a public health and safety concern.

Results indicate that under normal patterns of consumption the HBGV is unlikely to be exceeded for overall consumption of a range of fish species over time.

Fish and other aquatic species are highly nutritious foods and a source of protein, omega-3 fatty acids, vitamins and minerals and should be eaten as part of a varied and balanced diet. However overconsumption of fish and other seafood is not recommended because it may lead to potentially higher intake of harmful substances such as mercury.

These PFAS test results do not alter the recommended maximum fish consumption for a healthy diet (an average of 3 x 150 gram serves of these foods per week for an adult and 2 serves for an expectant or pregnant woman or a child). People are reminded to adhere to the fish consumption advice published by Food Standards Australia New Zealand. See

<http://www.foodstandards.gov.au/consumer/chemicals/mercury/documents/mif%20brochure.pdf>

As part of its detailed Ecological Risk Assessment, Defence will ensure sufficient testing is conducted to provide Katherine residents with a complete picture of any potential impacts on aquatic life downstream from the PFAS contamination at Tindal.

What about 'catch and release' on the Katherine River?

There are no concerns with catch and release fishing in the Katherine River or Tindal Creek areas.

What level of PFAS was found in fish in the Katherine River?

Samples of fish were collected in the dry season as part of the investigation. Additional fish sampling is required during the wet season to be able to draw a more meaningful conclusion and to enhance the confidence of the final advice to be provided to the public about consumption of various fish species from the river.

How did PFAS get into the Katherine River?

PFAS moved off-base at RAAF Base Tindal by leaching into groundwater, and through surface water run-off via drains and the Tindal Creek. The PFAS contaminated groundwater entered the Tindall Aquifer and moved in a westerly direction into the Katherine River. Tindal Creek flows through Uralla and discharges to the Katherine River in Katherine South.