

Botany Bay and Georges River: PFAS investigations

Precautionary dietary advice

Key points

- The NSW Government has released precautionary dietary advice for fish caught in Botany Bay and the Georges River after testing found per- and poly-fluoroalkyl substances (PFAS) in some species.
- Residents can continue to fish in Botany Bay and the Georges River but should follow precautionary dietary advice when eating their catch.

What are PFAS?

PFAS are a group of manufactured chemicals that include perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA) and perfluorohexane sulfonate (PFHxS).

Due to their fire retardant, waterproofing and stain resistant qualities, these chemicals were widely used in some types of fire-fighting foams and other industrial products worldwide. PFAS can also be found in low concentrations in many consumer products like food packaging, non-stick cookware, fabric, furniture and carpet stain protection applications, clothing and shampoo.

The most common and prevalent sources of PFAS in the environment is where fire-fighting foams were used for training purposes, particularly on Department of Defence bases and at fire-fighting training facilities.

PFAS are very stable chemicals that do not easily break down and can persist in the environment.

Products containing PFAS are being phased out around the world.

Are PFAS a health risk?

The Australian Government's PFAS Expert Health Panel, in its report to the Federal Minister for Health, noted there is no current evidence to suggest an increase in overall health risk related to PFAS exposure. However, the Expert Panel also said health effects cannot be ruled out at this time.

Because the risks are not fully known, the NSW Government takes a precautionary approach to limiting people's exposure to PFAS. This includes occasionally providing precautionary advice to help limit people's exposure to PFAS. The EPA is leading the PFAS Investigation Program to understand the prevalence of this emerging contaminant in NSW. This program will help NSW be better prepared to respond if any health and environmental impacts become known.

The Expert Panel's report and a factsheet providing more information on PFAS and human health is available at www.health.gov.au/pfas.

Why was testing undertaken in Botany Bay and the Georges River?

PFAS investigations are being undertaken at locations across NSW where there has been significant historical use of PFAS containing fire-fighting foams. These investigations are looking at the extent of the impact of PFAS, and the potential risks to the community.

What is known so far?

Investigations have found PFAS on and offsite at sites such as Botany Industrial Park, Sydney Airport and Caltex Kurnell.

The number of potential sources of PFAS in the area makes it difficult to attribute the detections to a specific source.

Investigations also found varying levels of PFAS in multiple fish species in Botany Bay and the Georges River.

Other species that were tested, but do not require precautionary dietary advice are Squid, Blue Swimmer Crab, Blue Groper, Red Morwong, Sand Whiting, Yellowfin Leatherjacket, Yellowfin Bream, Pacific Oysters and Sydney Rock Oysters. Farmed oysters are also safe to eat.

Can I still fish in Botany Bay and the Georges River?

Yes. You can continue to fish in Botany Bay and the Georges River. Please note that existing advisories and restrictions are in place for other areas of Botany Bay and the Georges River, and can be found at

www.dpi.nsw.gov.au/fishing/closures/location-closures/botany-bay-and-georges-river.

Can I still eat fish I catch from Botany Bay and the Georges River?

Yes. You can continue to eat fish from the area however, regular consumers should follow the below precautionary dietary advice to minimise their exposure to PFAS.

Please note, the advice below is if one single species is eaten per week. Eating multiple species would result in a greater exposure. For example, a child eating fish caught in the Georges River between Rabaul Road Boat Ramp and the Princes Highway would exceed the precautionary dietary advice if they ate one serve of Dusky Flathead and one serve of any other species listed in the table in a week.

Recommended maximum weekly intake for species caught in Georges River between Rabaul Road Boat Ramp and the Princes Highway (Tom Ugly's) Bridge

Species	Servings per week*	
	Children (2-6 years old)	All other age groups
Dusky Flathead	1	2
Estuary Perch	1	2
Mulloway	1	1
Silver Trevally	1	3
Sea Mullet	2	4
Luderick	4	#

Recommended maximum weekly intake for species caught in Botany Bay, and the Georges River, downstream of the Princes Highway (Tom Ugly's) Bridge.

Species	Servings per week*	
	Children (2-6 years old)	All other age groups
Mulloway	1	2
Estuary Perch	2	5
Dusky Flathead	3	#
Silver Trevally	3	5
Tailor	3	6
Luderick	6	#
Australian Salmon (Arripis Trutta)	Refer to specific advice below	

*Adult Serving size = 150 grams; Children Serving Size = 75 grams.

- No dietary advice is required based on the reported PFOS and PFHxS concentrations. Concentrations were below the adopted trigger values in the samples analysed.

Note:

- The consumption of offal in all species listed should be avoided.
- General fish and seafood consumption advice states that people should eat 2-3 serves of fish and seafood each week as part of a balanced diet.
- Independent of the site-specific advice related to PFAS above, pregnant women and women planning pregnancy, should refer to fish consumption advice published by Food Standards Australia New Zealand (FSANZ) relating to mercury. The advice can be found at www.foodstandards.gov.au/consumer/chemicals/mercury/Pages/default.aspx.

What is the precautionary dietary advice for Australian Salmon?

Due to the elevated levels of PFAS in Australian Salmon caught in Botany Bay, it is recommended that this species is catch and release only. However, should you wish to consume Australian Salmon, it is recommended that children (aged 2 to 6 years old) limit themselves to one serve per fortnight, and all other age groups limit themselves to two serves per fortnight.

Where can I find more information?

More information on the NSW Government's response to PFAS can be found at www.epa.nsw.gov.au/pfas.

If you have any questions or concerns, call the 24/7 NSW Environment Line on 131 555.