



# TOMAGO SANDBEDS

THE TOMAGO SANDBEDS ARE A SAFE AND RELIABLE BACK UP WATER SUPPLY FOR THE LOWER HUNTER. THEY CAN BE OPERATED DURING TIMES OF SHORTFALL AND PROVIDE 20 PER CENT OF THE REGION'S DRINKING WATER.



## YOUR DRINKING WATER IS SAFE

- The Tomago Sandbeds are a safe and reliable back up water supply for the Lower Hunter. They can be operated during times of shortfall and can provide 20 per cent of the region's drinking water.
- In collaboration with the NSW PFAS Expert Panel, a comprehensive plan has been developed to safeguard the water supply should the Sandbeds need to be operated. This plan includes a detailed monitoring and quality assurance testing program.
- Hunter Water's comprehensive water quality testing program tests for PFAS, including PFOS, PFOA and PFHxS, at all six of its drinking water treatment plants, at Campvale Canal and at 74 locations across its entire drinking water network.
- There have been no detections of the chemicals in our water supply above the Australian Drinking Water Guidelines. These guidelines are based on a person's lifetime exposure. Results from our water quality program can be found at [www.hunterwater.com.au/waterquality](http://www.hunterwater.com.au/waterquality).
- We are able to choose which bores are used and which are not when operating the Sandbeds. Bore stations 7 and 9, which are located inside the Williamtown Management Area, have been isolated and will not be used for supply without NSW Health approval.
- We have an extensive network of monitoring bores that have more than 50 years' worth of data to understand how groundwater moves in the aquifer.
- Hunter Water customers can have confidence in the controls that have been put in place to ensure their drinking water remains safe.
- Due to the geology of the Tomago Sandbeds, naturally occurring Iron and Manganese in the water can change its appearance. Discoloured water is an aesthetic, not a health issue.

## FREQUENTLY ASKED QUESTIONS

### Q: Why would Hunter Water operate the Sandbeds?

The Tomago Sandbeds are a safe and reliable back up water supply for the Lower Hunter. They can be utilised for a range of different purposes, including during times of shortfall, and can provide about 20 percent of the region's drinking water.

Hunter Water has undertaken extensive modelling to simulate the behaviour of its four water storage systems under a wide range of climatic scenarios. This is to understand how much water should be supplied from each system and when.

The modelling has found that the Sandbeds can be used to significantly extend Hunter Water's ability to withstand drought conditions, provided that they are triggered at the right time. This must be early enough to harvest water before it naturally flows out of the aquifer, but not so early that the Sandbeds are used too frequently and can't recover between droughts. It is based on these conditions that we have found the optimal time for using the Sandbeds is when Grahamstown Dam reaches about 70 percent storage.

### Q: Who makes the decision to operate the Sandbeds?

Hunter Water has developed an operating strategy for the Tomago Sandbeds in consultation with the NSW PFAS Expert Panel. This strategy was formally approved by the Expert Panel in May 2018 and allows us to operate the Sandbeds with controls in place to ensure that the water supply is safe. The implementation of the operating strategy is overseen by NSW Health.

### Q: Why doesn't Hunter Water operate the Sandbeds continuously?

Hunter Water continuously runs a boreline at the north-eastern end of the Sandbeds to supply the communities of Lemon Tree Passage and Karuah, and a boreline adjacent to Grahamstown Water Treatment Plant to recover water that is produced during the water treatment process. We regularly test this water to ensure it is safe to drink.

One of the reasons we don't operate the rest of the Sandbeds continuously is due to the high cost of treating the water. Due to its geology, the Sandbeds have naturally occurring iron and manganese in the water. This is not a health concern, but it can discolour the water. These minerals are costly and difficult to remove at our water treatment plant.

### Q: When was the last time the Sandbeds were operated?

The Sandbeds were last operated on two occasions in 2015. The first was for a period of six weeks for maintenance reasons and the second was for eight weeks to manage an aesthetic water quality issue. Bore stations 7 and 9 were not operated for supply on these occasions and continue to be embargoed today.

### Q: What is Hunter Water doing to ensure its water supplies are safe from PFAS contamination?

Hunter Water has an extensive 'catchment to tap' water quality monitoring program in place as part of our Drinking Water Quality Management System. We routinely test for a wide range of physical, chemical and biological characteristics at all stages of the supply system to ensure that our drinking water complies with the Australian Drinking Water Guidelines.

In addition, we test for PFAS including PFOS, PFOA and PFHxS, at all six of our drinking water treatment plants, at Campvale Canal and at 74 locations across our drinking water network. Our water quality testing results are updated monthly and can be found at [www.hunterwater.com.au/waterquality](http://www.hunterwater.com.au/waterquality).

**Q: How can Hunter Water be confident Grahamstown Dam is safe, given its proximity to RAAF Base Williamstown?**

Due to the direction of surface and groundwater flows in the area, water would need to flow uphill from RAAF Base Williamstown to enter Grahamstown Dam, even in wet conditions. This assessment is based on decades of ongoing hydrological testing and modelling.

Hunter Water can choose which bores are used and which are not when drawing water from the Sandbeds. Hunter Water has embargoed from use, or isolated, two of its bore stations in the Sandbeds as a precaution while further investigations are undertaken. It is possible that both of these bore stations may be able to supply safe drinking water again in the future, if appropriate management strategies can be implemented. The Sandbeds are used as a backup water source, and the water is tested for contaminants, including PFAS, before it enters the drinking water supply.

**Q: What should I do if my water is discoloured?**

Due to the geology of the Sandbeds, naturally occurring Iron and Manganese in the water can change its appearance. Discoloured water is an aesthetic, not a health issue. These minerals are difficult for us to remove at our Water Treatment Plant. We remove most of it, but not all of it. It's one of the reasons we don't run the Sandbeds continuously.

Discoloured water tends to occur in localised areas, and may be worse in 'dead-end' or cul-de-sac water mains. Our customers can first try clearing their water by turning their tap on full for a few minutes to flush their plumbing. If the water remains discoloured, it is best to contact our team on 1300 657 000 so we can send a technician to flush the mains in the street.