



GRAHAMSTOWN DAM FACT SHEET

GRAHAMSTOWN DAM IS THE HUNTER'S LARGEST DRINKING WATER STORAGE, A CRITICAL SUPPLY SYSTEM FOR HUNTER WATER CUSTOMERS



Hunter Water provides safe and reliable drinking water to over half a million customers in the Lower Hunter. We take a holistic approach to managing our water quality from catchment to tap, ensuring we deliver high quality water to our customers while protecting the environment.

Under our operating licence we are required to comply with the Australian Drinking Water Guidelines and requirements imposed by NSW Health. Quality is ensured by specifying health-based and aesthetic criteria as well as maintaining preventive measures to protect water quality from catchment to tap.

GRAHAMSTOWN DAM

Grahamstown Dam is the Hunter's largest drinking water storage, holding up to 182,000 million litres of water. It provides around half of the drinking water used by Hunter Water's customers on an ongoing basis. The proportion of water supplied by the dam can be much higher in times of drought and during peak demand periods.

Grahamstown Dam was formed by building an embankment across the outlet of a natural depression known as the Grahamstown Moors between Raymond Terrace and Medowie. Construction began in 1955 and was completed in 1965.

The dam received a major augmentation in 2005 to increase its storage capacity by 50%. The works involved construction of a larger spillway at Irrawang and discharge channel under the Pacific Highway.

GRAHAMSTOWN DAM'S DRINKING WATER CATCHMENT

Safe, high quality drinking water begins with healthy drinking water catchments. With a surface area of 28 square kilometres, the dam receives 35% of inflows via rainfall on its surface. As well as rain, the dam also receives inflows from its own catchment and the Williams River.

WILLIAMS RIVER CATCHMENT

Grahamstown Dam is an off-river storage primarily used to store water extracted from the Williams River. On average 37% of inflow to Grahamstown Dam is pumped from the Williams River. The Williams River catchment is made up of forested and pastoral land with pockets of urban developments and more intensive agriculture including poultry and dairy farms.

Water is transferred from the Williams River to Grahamstown Dam via the Balickera Canal and Pump Station. The 9 km canal runs from Boag's Hill, near Clarence Town, to Grahamstown Dam.

Seaham Weir, which is located on the Williams River near Seaham, is used to separate the downstream tidal estuarine salt water from the upstream fresh water and to control the upstream water level.

Hunter Water monitors water quality in the Williams River for nutrients before transferring water to Grahamstown Dam. Like most Australian rivers, the Williams River is highly influenced by climatic conditions and is consequently highly variable in flow and water quality. Flow and water quality are

assessed against pumping rules to minimise the nutrient load transferred to the dam.

GRAHAMSTOWN CATCHMENT

The dam also receives on average 21% of inflows via runoff from its own direct catchment. This catchment is made up of forested lands and some small farms and minor developments to the north of the dam.

MEDOWIE/CAMPVALE CATCHMENT

The remaining 7% of inflows to Grahamstown Dam is runoff from the east which comes directly from parts of the Medowie urban settlement area.

Stormwater from the Medowie/Campvale catchment drains into Campvale Drain and is pumped into Grahamstown Dam by Campvale Pump Station. Hunter Water is required under its Water Management Licence to operate Campvale Pump Station to minimise local flooding by transferring all runoff into Grahamstown Dam.

GRAHAMSTOWN WATER TREATMENT PLANT

Water stored in Grahamstown Dam is pumped to Grahamstown Water Treatment Plant at Tomago.

All water from Grahamstown Dam is fully treated before distribution to customers.

WHAT YOU CAN DO TO PROTECT DRINKING WATER QUALITY

Hunter Water works closely with landowners, residents, Port Stephens Council and other stakeholders to protect water quality. You can help protect water quality by:

- Complying with Water Wise Rules, including not hosing hard surfaces
- Reducing the amount of pesticides and fertilisers used, and avoid using such products when rain is expected
- Storing chemicals properly, so they do not leak
- Washing cars on lawns not on the street
- Properly maintaining and inspecting septic systems
- Complying with Council's and Hunter Water's requirements for development within the drinking water catchments when planning new developments

For more information contact Hunter Water on 1300 657 657, or visit hunterwater.com.au.



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