



CHICHESTER DAM - RIVER FLOWS AND FLOODS

CHICHESTER DAM – DRINKING WATER STORAGE IN A HIGH RAINFALL CATCHMENT



Chichester Dam is relatively small

Chichester is a small dam in a high-rainfall catchment. This means it fills and spills quickly in wet weather. When the dam is full, it holds 18,358 megalitres (ML) (1 ML = 1 million litres). Chichester Dam is:

- approximately 10% of the size of Grahamstown Dam at Raymond Terrace (when it's full).
- less than 1% of the size of Warragamba Dam in Sydney.

Drinking water storage

Chichester Dam is a water storage reservoir. It was not designed to manage flooding in the Chichester River.

Natural flows over the spillway

The dam has a fixed crest spillway. Once the dam is full, the water naturally flows over the spillway and down the river.

During heavy rain, once the dam is full, the amount of water flowing over the dam wall and down the river is the same as if the dam didn't exist.

The Chichester and Williams River flood – May 2025

During the May 2025 flood, the peak flow going over the dam spillway was about 43,500 ML/day. In a 24-hour period, this flow rate would have filled Chichester Dam more than twice.

Based on our records, this flow rate was the largest over the spillway since March 1978.

Downstream of the dam, peak flow in the Chichester River was 44,500 ML/day, being flow over the spillway plus release through the fully opened scour outlet.

On the Williams River, upstream of where the Chichester River joins it, the peak flow was approximately 68,000 ML/day.

On the Williams River at Dungog, after the Chichester River joins it, and accounting for some river water being stored in the flood plain, the flow was approximately 93,000 ML/day.

In the May 2025 flood, less than 50% of the recorded water flow in the Williams River near Dungog originated upstream of Chichester Dam.

Before and during a flood

Chichester Dam has a scour outlet used to lower the water level for maintenance purposes. The scour is also opened when the dam reaches the White Alert flooding level to flush silt from the base of the dam. The maximum rate of water release through the scour outlet is about 1,000 ML/day.

The scour outlet is not used to lower the water level before predicted wet weather because the forecast may not eventuate and the volume of water that can be released is minimal.

During a flood, Hunter Water employees are at the dam 24 hours a day to monitor its condition.

Contact us

Tel: 1300 657 657 (8am – 5pm)

www.hunterwater.com.au/chichester
chichester.dam@hunterwater.com.au