

Flooding

The Mount Crosby Water Treatment Plants (East Bank and West Bank) are a critical part of the SEQ Water Grid and supply about 50 per cent of South East Queensland's drinking water, including the cities of Brisbane, Ipswich and Logan.

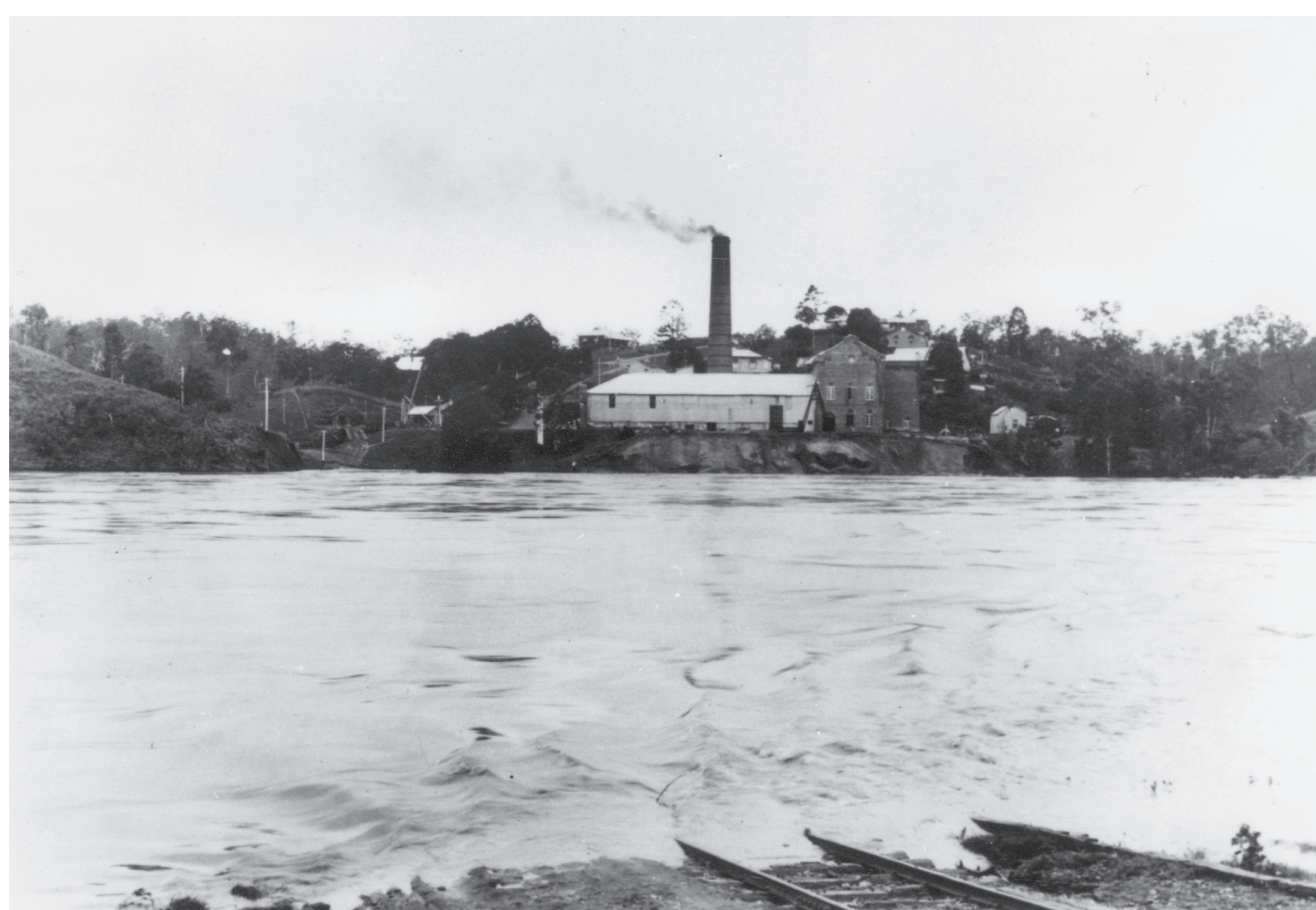
The 2016 Brisbane River Catchment Flood Study showed the probability of floodwater inundating the East Bank Pump Station site was greater than previously thought, which is why Seqwater is focused on mitigating the flooding risk to this essential infrastructure.

? Did you know?

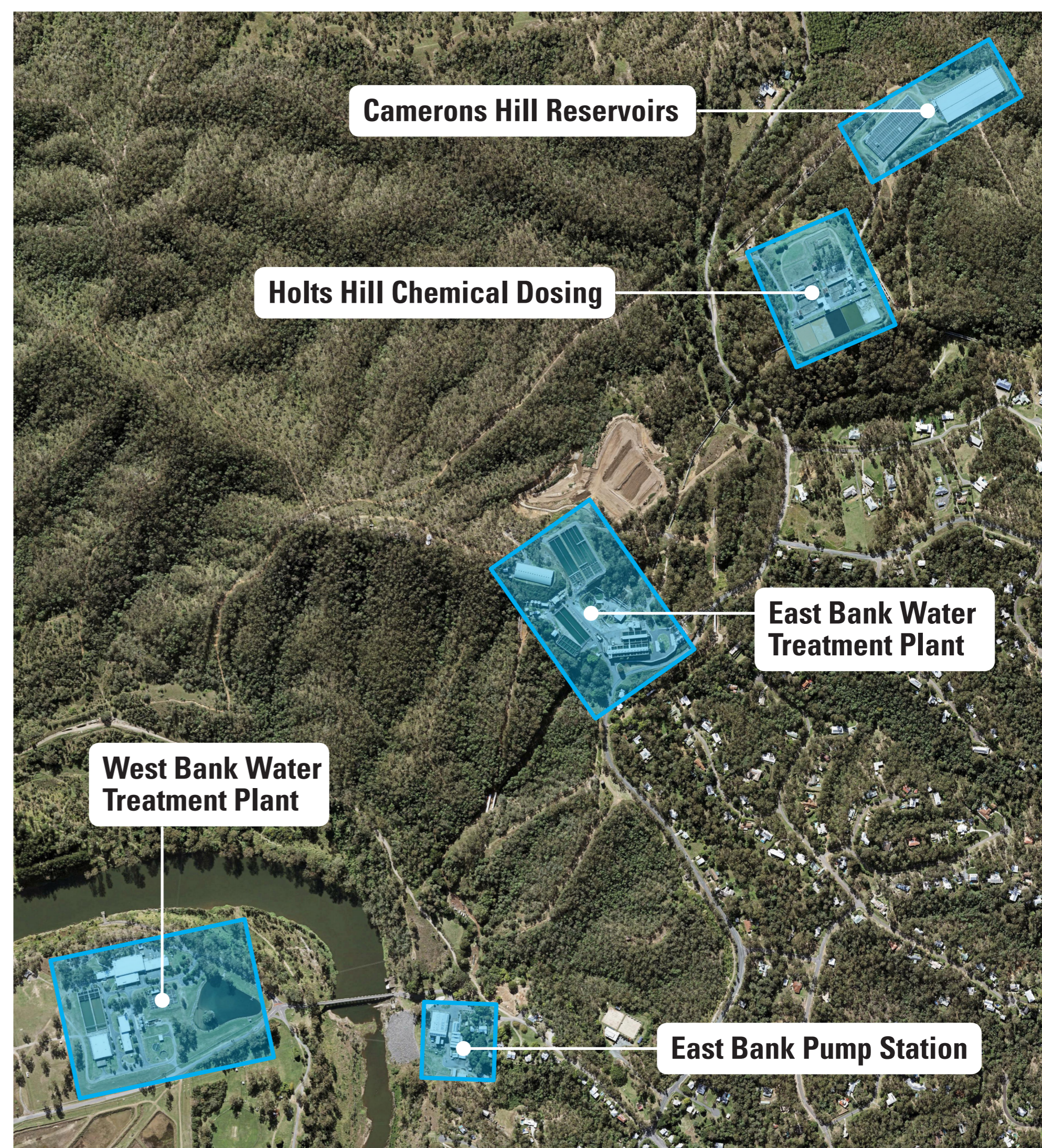
The Mount Crosby East Bank Water Treatment Plant has a treatment capacity of 500 megalitres per day, which is equivalent to about 200 Olympic swimming pools!



Flooding at the East Bank Pump Station now and then



Pumping station at Mount Crosby 1892, State Library of Queensland



East Bank Pump Station

The current flood immunity of the East Bank Pump Station is estimated to be between 0.5 per cent (1:200 AEP) and 1 per cent (1:100 AEP) Annual Exceedance Probability (AEP). This means that should the Brisbane River exceed a peak of 26.97 metres, the East Bank Pump Station will be inundated with water.

During the 2011 flood event, the river peaked at 26.1 metres. A slightly higher flood level would have resulted in inundation of the substation, putting the main electricity supply to the pump station and water treatment plant at risk. If the pump station was inundated, the recovery could take months.

East Bank Flood Resilience Program

The EBFRP aims to increase the flood immunity of essential bulk water infrastructure and critical electrical assets to secure South East Queensland's drinking water supply.

The Master Plan proposes to:

- construct a new substation and high voltage switch room on higher ground, at a site with a minimum flood immunity level of 1:10,000 AEP.
- construct a new pump station building at a site with a minimum flood immunity level of 1:10,000 AEP.

What is the Annual Exceedance Probability?

AEP is the probability of a flood of a given size being exceeded in any year. The probability can be expressed as a percentage or a ratio such as 1:100 or 1:10,000.