

From: Graeme O'Rourke

Sent: Fri 30/06/2017 1:27 p.m.

To: Bruce Crabbe

Cc: Mark Townsend

Subject: Re: Information request: Flood level at the wall

Message July 2004 Flood - Profile - Rangitaiki River 18 July 2004 event @ edgecu...xls

Hello Bruce,

In respect to the question asked by the review panel regarding a documented observation made in the [2004 Flood event](#), it was noted:

*An observer on the stop bank with Graham O'Rourke immediately before the breach in 2004 has commented that "We went to the top of the stop bank and I put my hand and arm down the wall and touched the flood water, a distance of only about 8 inches". This suggests a water elevation of around RL 6.75m – 200mm, which is RL 6.55m.*

I do not recall who the person was that 'put a hand and arm down the wall and touched the flood water' and then suggesting it was only 8 inches freeboard is puzzling?

Again, I agree with Peter West's comment that '*now I would have thought if it was only 200mm he would have said "hand" only.*

An 'arm and hand' measurement would suggest a distance of about approx. 600mm-800 which agrees with the survey data.

The surveyed 'flood debris level' just downstream of the College Road Floodwall at BM R28L was measured at RL 6.0m. The top of the Concrete wall was approx. RL 6.8m.

Conclusion – It is clear from surveyed flood profiles (attached file or Objective file A503915) , that peak flood levels adjacent to and opposite (true right bank) the College Road Floodwall are in the order of RL 6.00m, NOT RL 6.55m as deduced by a hand/arm measurement.

This observation can be discounted as incorrect or misinterpreted at time of documentation.

Graeme

Graeme O'Rourke

Principal Engineering Surveyor

Bay of Plenty Regional Council Toi Moana

*Thriving together – mā te taiao, mā ngā tāngata*