

----- Forwarded message -----

From: Peter Blackwood <Peter.Blackwood@boprc.govt.nz>

To: Cleo Hanlon <Cleo.Hanlon@boprc.govt.nz>

Cc: Peter West <peter.west@blueduckdesign.co.nz>, Mark Townsend

<Mark.Townsend@boprc.govt.nz>, Martin Butler <Martin.Butler@boprc.govt.nz>, Ken Tarboton <Ken.Tarboton@boprc.govt.nz>

Bcc:

Date: Thu, 22 Jun 2017 23:28:33 +0000

Subject: Bay of Plenty Regional Council: Rangitaiki River Scheme Review Further information requested by Kyle Christensen on 21 June at 1056 - Fixed spillway simulation  
23 June 2017

## **Bay of Plenty Regional Council Rangitaiki River Scheme Review Further information requested by Kyle Christensen on 21 June at 1056**

### **Question:**

1. Can you please run a scenario of the flood as it happened but with Reids Floodway fully operational including the lower level fixed weir spillway (as modelled for the basis of the PDP 2014 Report – Rangitaiki Spillway Options Analysis). I would like to know the flow down the floodway and main river as well as the modelled water level time series for MIKE 11 model chainage RANGITAIKI 13868 for this scenario.

### **Response:**

Please refer attached spreadsheet from modelling carried out by Philip Wallace. Please note Phil's rider that he had to excavate the floodway behind the spillway, to allow the flow to get away past the lowered spillway. This would of course be a component of the weir spillway construction.

The following describes the location of the data requested:

Flow down the floodway: Columns H & I (column I is used in the graph presented)

Flow down the main river: Upstream of the spillway Column D. Downstream of the spillway Columns E, F, G

Water Level Chainage 13868: Column Q.

### **Peter Blackwood**

Principal Environmental Engineer

**Bay of Plenty Regional Council Toi Moana**

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

**From:** Philip Wallace [mailto:[plw@dhigroup.com](mailto:plw@dhigroup.com)]

**Sent:** Friday, 23 June 2017 10:48 a.m.

**To:** Peter Blackwood

**Subject:** FW: Fixed spillway simulation

Get back to me if you need any explanation

**From:** Philip Wallace

**Sent:** Friday, June 23, 2017 10:17 AM

**To:** 'Peter West' <[Peter.West@boprc.govt.nz](mailto:Peter.West@boprc.govt.nz)>

**Subject:** Fixed spillway simulation

Hi Peter

Attached are results for the fixed spillway option, with the April 2017 flood. Peak spilling of around 155 cumecs.

As I mentioned yesterday, I have had to excavate the floodway behind the spillway, to allow the flow to get away past the lowered spillway.

Regards

Phil

**Philip Wallace**

Principal Engineer, Wellington Branch Manager

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