

Terms of Reference:

Rangitāiki River Scheme Review – April 2017 flood event

Background

The Bay of Plenty region was inundated with rain and severe weather from ex-Tropical Cyclone Debbie from 3 to 6 April 2017. Although the whole of the region was affected, the eastern Bay of Plenty felt the most significant impact.

The Whakatāne State of Local Emergency was declared on 6 April 2017 in response to the flooding caused by the significant rain from ex-Tropical Cyclone Debbie. The high rainfall resulted in all rivers in the region reaching warning levels with the some rivers reaching potentially record levels. A breach of the Rangitāiki River stopbank at College Road in Edgecumbe occurred on the morning of 6 April 2017, which resulted in widespread flooding of properties and the evacuation of people from the town. The breach at College Road was sealed late on the night of 7 April 2017 with further work undertaken during the day on 8 April 2017.

A region-wide State of Local Emergency was declared on 11 April 2017 in anticipation of the imminent impact of ex-Tropical Cyclone Cook, superseding the Whakatāne State of Local Emergency that was already in place. Ex-Tropical Cyclone Cook affected the region through the evening and night of Thursday 13 April 2017.

The region-wide State of Local Emergency was lifted on 14 April 2017, with a Whakatāne State of Local Emergency being re-declared at the same time for the next seven days. This came to an end at 12 midday on 21 April 2017, at which point the recovery phase commenced.

The Bay of Plenty Regional Council manages river and drainage schemes across the Bay of Plenty for the benefit of the community. The breached stopbank in Edgecumbe is part of the infrastructure assets that make up the Rangitāiki-Tarawera Rivers Scheme. The Scheme provides stopbanks, channel edge stability works and some drainage and flood pumping services to the township of Edgecumbe and the Rangitāiki, Galatea and Waiohau Plains. The Matahina and Aniwhenua hydro-electric power stations, and their associated hydro lakes, are located on the Rangitāiki River, upstream of Edgecumbe. Each year Bay of Plenty Regional Council spends more than \$3 million maintaining the Rangitāiki-Tarawera Rivers Scheme and over the last ten years has spent around \$30 million on capital works. Expenditure on the Scheme is funded primarily from targeted rates (80 percent) on property owners within the Scheme area.

There has been a major impact on people and property from the breach of the stopbank at College Road, Edgecumbe. The entire Edgecumbe township was evacuated as many urban and rural properties became inundated. In the days following the breach some residents were able to return to their homes. However, at the beginning of May 2017, there were 16 damaged properties that had been assessed as severely damaged and around 250 lesser damaged properties that had been assessed as habitable with repairs.

The Bay of Plenty Regional Council recognises and appreciates that many people in the community are looking for answers – understandably asking how this breach could happen and what could have been done to prevent it. On 10 April 2017 The Chairman announced this independent review on the infrastructure and the circumstances that led to the breach of the stopbank and associated flooding through Edgecumbe on 6 April 2017. It is a technical review that will focus on the Regional Council's responsibilities.

Purpose of and Audience for these Terms of Reference

The Bay of Plenty Regional Council (BOPRC) wishes to record its intentions in relation to the independent review. This Terms of Reference is a public document intended for those members and organisations of the Bay of Plenty community affected by the flood event, as well as stakeholders more generally, including relevant government ministers. It sets out the task of the independent review panel.

Purpose of the Review

The purpose of this review is to understand the circumstances that led to the breach of the Rangitāiki River stopbank at College Road, Edgecumbe, and the resulting flooding through the town on 6 April 2017.

Governance and Leadership of the Review

BOPRC has initiated and commissioned this independent review and is the approver of the Terms of Reference.

The review will be led by Sir Michael Cullen who will chair a panel of experts. This will ensure the review is an independent, impartial, arms-length assessment of BOPRC infrastructure and activity.

Review Scope

The scope of the review has two interlinked parts:

1. The operation of the Rangitāiki River Scheme assets, including design, engineering, maintenance and management, that BOPRC manages on behalf of the community;
2. Implementation of the flood management role¹ that BOPRC delivered during the ex-Tropical Cyclone Debbie event up until the breach and in response to that breach.

The Panel will report its findings on the circumstances that led to the breach and will make recommendations it considers fit on matters within the review scope, including recommendations relating to future actions that the Regional Council might take.

Exclusions

The review has been commissioned by the BOPRC to cover matters it is responsible for. It is not intended to cover district council roles and responsibilities, including but not limited to:

- The effectiveness of the local Civil Defence Emergency Management response, including the timing and notification of evacuations; and
- The establishment and implementation of the recovery phase of the flood event.

The following matters are also outside the scope of the review:

- The Civil Defence Emergency Management Bay of Plenty Group role in and response to the event; and
- The appropriateness and effectiveness of the terms and conditions of the respective resource consents for the dams, hydro-electric power stations and spillways on the Rangitāiki River upstream of Edgecumbe, their monitoring (other than in respect of flood management) and the processes by which the consents were granted under the Resource Management Act 1991.

¹ This includes management of water through the dams on the Rangitāiki River, upstream of Edgecumbe.

Review Panel

The Panel will be comprised of three members:

- Sir Michael Cullen – Chair, spokesperson, member of the eastern Bay of Plenty community.
- Kyle Christensen, Water Resources Engineer – Panel member, technical expert.

Key affiliations: Chartered Professional Engineer; Professional Member of and practice area assessor for Institution of Professional Engineers New Zealand (IPENZ); and Chairman IPENZ/Water NZ Rivers Group.

Key areas of expertise: River and stormwater engineering; numerical modelling of hydrology, hydraulics and sediment transport; detailed design of river control works and hydraulic structures; operational flood response; and design review and failure diagnosis of flood and erosion protection works.

Kyle Christensen is an independent consultant.

- Charlie Price, Geotechnical Engineer – Panel member, technical expert.

Key affiliations: Chartered Professional Engineer; Fellow of Institution of Professional Engineers New Zealand (IPENZ), International Professional Engineer; and Chairman NZ Geotechnical Society.

Key areas of expertise: Geotechnical engineering; ground investigation; earthquake geotechnical engineering; and investigation, design, supervision and contract management of major construction works for dams, hydro-electric power, water supply, and mining developments.

Charlie Price is employed by MWH New Zealand Limited.

The Panel will be advised by an independent Legal Advisor. It may request advice from other subject matter experts during the course of the review.

The Panel will be supported by a Secretariat.

Public Opportunity to Provide Information, Input and Feedback

The Panel will ensure that all members of the community affected by, and all stakeholders with an interest in, the flood event that resulted from the breach of the Rangitāiki River Scheme stopbank on 6 April 2017 are given the opportunity to provide information, input and feedback. The Panel shall accept written input and feedback and will also provide an opportunity for verbal input and feedback to be provided. It will initiate meetings with community and stakeholder groups that it identifies as well as groups identified by BOPRC to the Panel.

BOPRC will provide full disclosure to the Panel of all the information it holds. It will also provide the Panel with full access to any relevant staff. In order to be effective, it is expected that the Panel will receive information and hear from, organisations outside of BOPRC.

Timeframes

The Panel should provide its final report to BOPRC by or on 31 July 2017.

Reporting Sequence

The Panel is to provide its report, including its findings and recommendations, to BOPRC in writing no later than the date specified in this Terms of Reference. Any delays in meeting this date are to be agreed with the Chairman of the BOPRC.

The Panel must provide a draft report to BOPRC for a factual check only. The Panel shall allow BOPRC ten working days to undertake this factual check, giving a minimum of five working days notice of the delivery date of the draft report.

The Panel's report will be made public. BOPRC may receive and consider the outputs of the review in confidence, prior to their public release, to enable it to prepare and provide an initial response to the Panel's findings and recommendations.

Enquiries

All enquires relating to providing input to the review should be directed to the review Secretariat in the first instance. Contact information will be publicly available and will also be available on the review website: www.rrsr.org.nz.

Any enquires to BOPRC should be directed to Mat Taylor, General Manager Corporate Performance, by phone 0800 884 880 or email mat.taylor@boprc.govt.nz.

Approval

These Terms of Reference were approved by resolution of the Bay of Plenty Regional Council on:

Date 18 May 2017

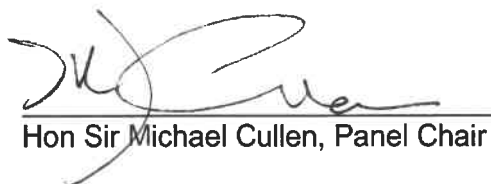


Doug Leeder, Chairman BOPRC

These Terms of Reference were accepted by the review Panel on:

Date

22/5/2017



Hon Sir Michael Cullen, Panel Chair