

## The way forward

Feedback from property owners in the Awatarariki fanhead zone, and the views of the wider Matatā community, will assist the decision-making process.

Consultation will also be undertaken with other key stakeholders, including the Rangitāiki Community Board, Matatā Residents Association, Iwi and all of the Government agencies which have been involved in the Matatā regeneration projects.

The Council is acutely aware of the need to progress this matter as quickly as possible. That sense of urgency must be tempered by the primary need to achieve the best long-term solution for all.



Tony Bonne  
MAYOR



Marty Grenfell  
CHIEF EXECUTIVE



## AWATARARIKI PROJECT REVIEW SUMMARY

2 July 2012

In early-March, the Whakatāne District Council placed the planned construction of a ring net debris detention structure in the upper Awatarariki Stream catchment on hold and initiated an urgent review of this project. That followed expressions of concern by the Council's engineering consultants, and independent advisors, about the viability and cost of the proposed structure.

The project review was led by Alan Bickers, a highly experienced engineer and local government leader and consultant. His report will be received by the Council's Projects and Services Committee on Wednesday, 4 July. This document summarises the review findings.

### Background

On 18 May 2005, an intense storm in the catchments above Matatā caused flooding and debris flows which destroyed 27 houses and damaged 30 percent of the properties in the township.

The Whakatāne District Council made a policy decision to work with Government agencies and the community to implement a recovery plan and protect the town from future debris flow events. That plan included a debris dam in the upper Awatarariki catchment and a debris flood channel in the fanhead zone below the escarpment.

Engineering consultants Tonkin and Taylor began preliminary design work on the planned structure, but community and Iwi opposition saw that concept replaced in July 2008 with a flexible ring net, partial-containment (100,000 cubic metres) proposal in the upper catchment, with a spillway and other works in the lower catchment. The total estimated cost for that work was \$2.4 million.



A peer review of the proposal saw the ring net design change to “full-containment” of a 250,000 cubic metre debris flow in the upper catchment and removal of the spillway. Design work went ahead and a resource consent was lodged for the project in 2010. In early-2012, Tonkin and Taylor approached the Council to express concerns about the viability and mounting cost of the proposal, which by then, was estimated to be between \$5 million and \$7 million. An independent review of the project by CPG New Zealand Limited supported those concerns.

### Key Review Findings

Significant findings of the review team are as follows.

1. Following the 2005 debris flow, the Whakatāne District Council’s desire to provide certainty for property owners resulted in a rapid and generally well-managed start to the investigation of engineering solutions. Responsibility for the mitigation works should, however, have been investigated in more detail.
2. Despite legal advice to the contrary, WDC assumed that under a “retreat” option, it would be required to purchase the affected properties at market value. That assumption had a material effect on the selection of the preferred option - a debris dam in the upper catchment and flood channel on the fanhead.
3. The change to a ring net debris detention structure in 2008 meant Tonkin and Taylor was heavily dependent on other organisations for the design and cost estimates of the structure.
4. The change in project scope to a full-containment structure, combined with the complexity of the anchorage requirements, saw the estimated cost climb from \$2.4 million to \$5.8 million by 2011.
5. Despite the fact that the most significant element of the planned Awatarariki works – the debris detention structure - has not been constructed, total expenditure on works in the catchment is more than 90 percent of the original budget of \$5.26 million.
6. Given the uncertainties surrounding the design, construction and maintenance of the ring net structure, and the community and tangata whenua objections to the original debris dam proposal, there is no reasonable possibility of achieving a successful upstream debris detention solution. The review report therefore recommends that the debris net proposal be abandoned and that other upstream options should not be pursued.
7. If the Council adopts that course of action, mitigation options downstream of the Awatarariki escarpments could be investigated.
8. The stream realignment and bank protection work undertaken since 2005, the reinstatement of a number of buildings on the fanhead, and the construction of the two-span railway bridge mean that the situation now is materially different from that when mitigation options were originally considered.

### Mitigation Options and Issues

Four possible downstream mitigation options are available for consideration. Three of these were among the original options considered for dealing with future debris flows from the Awatarariki Stream. These involve bunding on three possible alignments to channel debris and flood flows and direct debris deposits to the west of Matatā, away from the built-up areas to the east of the stream. A fourth option is to construct a debris detention basin north of SH2.

### Future Actions and Consultation

At its meeting on 4 July, the Projects and Services Committee will consider a number of recommendations, including:

**THAT** the Whakatāne District Council takes no future action to develop solutions for debris detention of the Awatarariki Catchment upstream of the escarpment;

**THAT** the Whakatāne District Council commences a process of re-evaluation of the downstream options for debris control from the Awatarariki Catchment;

**THAT** the Matata Projects Governance Group provides a report to the 1 August Council Meeting on the work required to undertake a re-evaluation of the downstream options for debris control from the Awatarariki Catchment, including a project plan and proposed timeline; and

**THAT** the Chief Executive considers and, where appropriate, gives effect to the recommendations of the “Review of the Awatarariki Catchment Debris Control Project” report relating to project governance within the Whakatāne District Council.

