

Report To: Regional Council

Meeting Date: 14 February 2017

Report From: Chris Ingle, General Manager, Integrated Catchments

June 2016 Flood Damage Costs

Executive Summary

This paper provides details of the cost estimates and funding for repairing flood damage to river schemes following the June 2016 flood event.

The initial cost estimate to repair all of the flood damaged sites is \$2,109,000. Funding is available from schemes' works reserves (\$1,003,900), current year's maintenance budgets (\$1,085,062), and external funding (\$20,000).

Flood repair works have commenced using existing scheme budgets available in the 2016/17 Annual Plan. To complete the works in the current financial year approval is required to withdraw funds of \$1,003,900 from schemes' works reserves and to increase expenditure by \$1,023,900.

Each flood damage site has been assessed using a risk-based matrix, and a prioritisation schedule developed to complete the programme of works.

Recommendations

That the Regional Council:

- 1 Receives the report, June 2016 Flood Damage Costs;**
- 2 Approves the withdrawal of \$1,003,900 from schemes' works reserves to fund flood damage repairs works in the Waioeka-Otara, Whakatāne-Tauranga, Rangitāiki-Tarawera and Kaituna River Schemes;**
- 3 Approves additional expenditure in the 2016/2017 financial year of \$1,023,900 to complete the flood damage repair programme of work;**
- 4 Notes that progress on flood damage repairs will be discussed at each scheme liaison group meeting during March 2017.**

1 Introduction

The major rivers and drainage schemes of the Bay of Plenty suffered riverbank damage as a result of the June 2016 flood event. Estimates for the damage repairs

currently total \$2,109,000 spread across the Waioeka-Otara, Whakatāne-Tauranga, Rangitāiki-Tarawera and Kaituna Schemes.

A risk-based prioritisation analysis has been undertaken to programme prioritisation of individual sites and to inform scheme managers of the ongoing risk at sites that remain exposed during the repair programme or where works are low priority and planned to be left 'on-hold' and monitored.

Flood repair works have commenced, being funded through existing 2016/17 Annual Plan budgets. Currently there is \$1,085,062 available within existing scheme budgets to partially complete the repair programme. This budgeted funding is made up of annual flood damage allowances of \$751,325 plus \$333,737 within the maintenance budgets for rock works and planting.

To complete all recommended flood damage site repairs additional funding of \$1,003,900 is required.

1.1 Scheme Flood Damage Reserves

Reserves are managed for each scheme in two ways: (1) for more frequent floods, up to about a five year return period and (2) for larger floods above the 5 year return period.

For floods up to the five year return period, any unspent budget from previous years annual flood damage allowance is put into the works reserve which is available in subsequent years if shortfalls are experienced.

The current works reserve balances for each scheme are set out below:

*Table 1: Works reserve balances**

Waioeka-Otara Scheme	\$112,505
Whakatāne-Tauranga Scheme	\$333,788
Rangitāiki-Tarawera Scheme	\$419,170
Kaituna Scheme	\$800,156

* These reserve balances include the targeted rate 80% and the regionally funded 20% portions combined for simplicity.

For floods above the five year return period, a separate flood damage reserve has been established that can only be drawn from following a flood in excess of this threshold, and with Council approval.

The current flood damage reserve balances for each scheme are set out below:

Table 2: Flood damage reserve balances

Waioeka-Otara Scheme	\$1,403,138
Whakatāne-Tauranga Scheme	\$1,449,738
Rangitāiki-Tarawera Scheme	\$2,150,321
Kaituna Scheme	\$1,940,604

1.2 June 2016 Flood Event

An assessment of the size of the June 2016 flood event for each scheme has been carried out against Council policy for accessing funds from the flood damage reserves. Only the Whakatāne-Tauranga Scheme exceeded the five year threshold to request funds from Council, see table 3 below:

Table 3: Flood return periods

Scheme	Return Period (Years) (approx. average recurrence interval)
Waioeka-Otara	1 in 2.33 (annual)
Whakatāne-Tauranga	1 in 7.5
Rangitāiki-Tarawera	1 in 4
Kaituna	1 in 2.33 (annual)

1.3 Funding Recommendation

Staff have worked through each scheme's current flood damage costs, reserves and 2016/17 maintenance budgets to recommend a funding option to repair the flood damages.

The proposal will require approval from Council to transfer funds totalling \$1,003,938 from the works reserves and approval to increase expenditure from 2016/17 budgets by \$1,023,938. The \$20,000 difference relates to a site in the Whakatāne-Tauranga Scheme being funded on a cost share with Whakatāne District Council.

The remaining costs to complete the programme of works are already included in the 2016/17 scheme budgets.

The full breakdown of costs, funding sources and remaining reserve balances following withdrawals is set out in table 4 below.

1.4 Options

Option 1. Council approves the funding recommendation and additional expenditure to complete the flood damage repair programme in full. This is the recommended option.

Option 2. Council declines the funding recommendation and additional expenditure. Flood damage repairs will continue on a risk priority basis but will be only partially completed under current 2016/17 budgets. This option would result in approximately 46 low and medium priority sites being put 'on-hold' and monitored.

Option 3. Council approves full or partially additional funding for flood repairs from an alternative funding source.

1.5 Liaison Groups Update

During the March 2017 scheme liaison group meetings an update will be given to each scheme on progress towards completion of flood damage works. Where flood damages have been repaired and completed, actual costs compared with estimates for each site will be provided.

Table 4: Proposed funding sources.

Flood Damage June 2016 Event									
Scheme	Costs	Funding Sources						Balances	
	Flood Damage Estimate	Current Year Budget Flood Damage Allowance	Current Year Budget Maintenance (rock and planting)	Available Funding from Works Reserve	External Funding	Required funding from Flood Damage Reserve	Total Funding	Flood Damage Reserve	Works Reserve following withdrawal
				See note 3					
Kaituna	\$348,000	\$209,525	\$0	\$138,475	\$0	Nil. see note 1	\$348,000	\$1,940,604	\$661,681
Rangitāiki Tarawera	\$763,000	\$193,500	\$150,330	\$419,170	\$0	Nil. see note 1	\$763,000	\$2,150,321	\$0
Whakatāne Waimana	\$586,000	\$193,500	\$38,712	\$333,788	\$20,000	\$0. see note 2	\$586,000	\$1,449,738	\$0
Waioeka Otara	\$412,000	\$154,800	\$144,695	\$112,505	\$0	Nil. see note 1	\$412,000	\$1,403,138	\$0
Totals	\$2,109,000	\$751,325	\$333,737	\$1,003,938	\$20,000	\$0	\$2,109,000	\$6,943,801	\$661,681
Note 1 The event did not reach the "5 year" flood threshold to withdrawn funds from the flood damage reserve as per the current policy.									
Note 2 The event reached the "5 year" threshold but no withdrawal is required to complete all flood damage sites									
Note 3 These reserve balances include the both the targeted rate 80% and regionally funded 20% portions									

2 Council's Accountability Framework

2.1 Community Outcomes

This proposal directly contributes to the Environmental Protection, Resilience and Safety, and Economic Development Community Outcomes in the council's Long Term Plan 2015-2025. Staff keep stakeholders informed of these planned works, physical progress, and completed costs via the river scheme liaison group meetings.

2.2 Long Term Plan Alignment

Flood repair work is anticipated and provided for under the Rivers and Drainage Schemes Activity in the Long Term Plan 2015-2025 and the Rivers and Drainage Asset Management Plan.

Current Budget Implications

Although this programme of repair work is additional to the routine work programmes, sufficient funding is available through routine budget allowance for annual flood damages and the scheme's working balance credits. Funding of this work as recommended will not affect the scheme's targeted rates.

Future Budget Implications

Future work on Rivers and Drainage Schemes is provided for in Council's Long Term Plan 2015-2025.

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for General Manager, Integrated Catchments

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