



Rangitāiki-Tarawera Rivers Scheme Advisory Group Meeting

Wednesday 9 September at 10am

CMR1 (Mātaatua)
Bay of Plenty Regional Council
5 Quay Street
Whakatane

Rangitāiki-Tarawera Rivers Scheme Advisory Group Meeting

Wednesday 9 September 2020 at 10am

Agenda

- 1 **Welcome**
- 2 **Apologies**
- 3 **Notes of previous meeting held 11 March 2020**
- 4 **Matters arising from previous meeting**
- 5 **Central government funded projects**
- 6 **Engineering update**
- 7 **Rangitāiki Monitoring**
- 8 **Gravel management**
- 9 **Operations update**
- 10 **April 2017 Flood Repair Project update**
- 11 **River scheme planning (Asset Management Plan, Long Term Plan)**
- 12 **Finance report**
- 13 **Co-governance/community group updates**
 - Presentation – Lake Aniwaniwa Galatea Walking / Cycling Track
- 14 **General business**
 - Infrastructure insurance
 - Review of the Floodway and Drainage Bylaws 2008
 - Advisory group membership - September 2020 to September 2023

Notes of the Rangitāiki-Tarawera Rivers Scheme Advisory Group meeting held at Edgecumbe War Memorial Hall, on Wednesday 11 March 2020, commencing at 10am

Chair: Councillor Bill Clark

Advisory Group: Alan Law, Linda Virbickas, Peter Askey, Shona Pedersen, Jim Finlay (Whakatāne District Council), Councillor Alison Silcock (Whakatāne District Council)

BOPRC Councillors: Councillor Toi Kai Rākau Iti

BOPRC Staff: Kirsty Brown (Rivers and Drainage Assets Manager), Jo Heath (Asset Management Coordinator), Hemi Barsdell (Asset Management Specialist), Bruce Crabbe (Rivers and Drainage Operations Manager), Andrew Pawson (Area Engineer), Tony Dunlop (Flood Repair Project Engineer), Paula Chapman (Flood Repair Project Manager), Mark Townsend (Engineering Manager), Chris Ingle (General Manager Integrated Catchments), Charles Harley (Team Leader Eastern Catchments)

Apologies: Maurice Warbrick

1 **Welcome**

Councillor Clark welcomed everyone, and Councillor Iti opened the meeting with a karakia.

Councillor Clark introduced Councillor Iti, the new councillor for the Kōhī Constituency replacing Tiipene Marr. With a new Council elected in October 2019, Councillor Clark and Councillor Iti are the Regional Council representatives on the advisory group.

Kirsty Brown introduced Hemi Barsdell and explained his role as Asset Management Specialist with the Rivers and Drainage Assets team.

2 **Apologies**

Apologies were received as recorded above.

3 **Notes of previous meeting held 11 September 2019**

Resolved

That the Rangitāiki-Tarawera Rivers Scheme Advisory Group:

- 1 Confirm the notes of the meeting held 11 September 2019 as a true and correct record.**

**Law/Askey
CARRIED**

4 **Matters arising from previous meeting**

There were no matter arising from the previous meeting.

5 **Performance assessment of critical assets**

Kirsty Brown advised that Roger Waugh (RiverSpace Ltd) had been contracted to undertake a performance assessment of Regional Council's critical flood protection assets.

Key points included:

- As part of Council's asset management improvement focus a risk-based framework, developed by the New Zealand Rivers Managers Group, has been implemented to assess the performance of critical flood protection assets.
- Critical assets are those that have a high consequence, but not necessarily high probability, of failure e.g. stopbank networks through urban areas. For the Rangitāiki-Tarawera Scheme the framework has been used to assess assets in the Edgecumbe urban area.
- The performance assessment process has three stages – risk identification, risk management and risk communication. The risk identification stage is complete and now staff are working through the risk management and risk communication stages.
- The main issue affecting the risk profile for the critical Rangitāiki River assets is soil type e.g. sand layers that are prone to seepage and piping.
- A full outline of the risk profile will be presented to advisory groups at the September meetings.

Attendance: Linda Virbickas joined the meeting at 10:10 am.

6 **River scheme planning**

Hemi Barsdell spoke to the report provided in the agenda pack. Council staff are seeking feedback from the group as to what involvement they would like in Asset Management Plan and Long Term Plan (LTP) processes. Staff want to engage with advisory groups early in the process to look at budgets, and discuss long-term implications and options.

- Members felt a workshop involving all members would be appropriate.
- They wanted to be well prepared to get the best value out of the workshop and requested that draft figures be circulated well in advance and that they are provided with current LTP information.
- Current LTP information is available on the Council website together with quarterly performance monitoring reports which have been circulated to group members as they are published. The Long Term Plan 2018-2028 and supporting documents can be found at <https://www.boprc.govt.nz/your-council/plans-and-policies/plans/long-term-plan/>. The latest performance monitoring report *Arotake Tuarua – July to December 2019* can be found at <https://www.boprc.govt.nz/your-council/documents-and-publications/reports/>

ACTION:

A planning workshop with advisory group members to be scheduled for April/May with draft budget information circulated well in advance of the workshop. (NB this was pre-Covid)

7 Operations update

Bruce Crabbe spoke to the Works Programme report provided in the agenda pack.

Key points included:

- The 2019-2020 maintenance budget is \$1.3 million, including \$200,000 allocated for annual flood damage. Bruce reported that the maintenance work programme is currently on track and within budget.
- Members commented that the works programme report is very confusing and difficult to make sense of. Bruce agreed and advised that he is currently working to improve and simplify the reporting, supported by the new asset management system.
- Even with proactive poisoning programmes, rabbits have continued to be an issue on stopbanks. Finding that controlled areas are quickly repopulated from the surrounding area and that rabbits like hiding out in shelter belts. The main issue is when a rabbit warren develops within a stopbank. In these cases gas is used to eradicate the warren, the sites are excavated to track the holes back to solid ground, and then the stopbank is rebuilt. Landowners are encouraged to contact Council if they see any rabbit activity along stopbanks.

Andrew Pawson delivered a presentation on a range of operational and scheme maintenance work.

Key points included:

- A small, mobile, hydro-seeder has recently been purchased to help speed up revegetation of disturbed sites. Once sites have been repaired and top-soiled they are hydro-seeded with a suitable vegetation seed mix, including native carex and rush species.
- Willows are quick and easy to grow and are a cost effective erosion control tool in most low river velocity sites. Andrew explained the advantages of the various ways willows are grown to achieve bank stabilisation and provide wildlife habitat. The methods include: pole planting, layering, trenched willows, and transplanting live willows. Willow maintenance is a large part of the Operations teams work and willows perform best when their height is maintained by topping and mulching.
- New Zealand has depended on willows for erosion control and soil conservation for decades and has a wealth and depth of knowledge about the performance of the different varieties.
- Alternatives to willows were discussed and Bruce advised that Bay of Plenty Regional Council is leading the way in trialling alternatives. The main need is for vegetation that is fast growing, handles wet feet, has a wide spreading root system and is not prone to toppling. A number of native species have been trialled and have found that generally natives are slow growing, require a lot of management, and most are better used as buffer plantings behind erosion protection plantings or rock edge protection. Toi toi can be used as river edge protection as it has a good stabilising root system and bends over in a flood situation. Flax is not suitable as it becomes top heavy, the clumps get washed away in flood events leaving a hole in the bank, and they become an issue within the river channel.
- A parasitic wasp (*Pauesia* sp.) has been released at two sites in Galatea as part of a Scion led project to control Giant Willow Aphid. Sites are being monitored to assess the effect of the wasp on the Giant Willow Aphid population. The wasps lay their eggs inside the aphids, the eggs hatch, and as the pupae develops the aphid dies.
- Staff have been trialling eel tubes (a series of metal tubes formed into a triangular prism) placed into areas of new rock work to provide habitat for eels. They have been very successful with eels moving in soon after installation.

- Currently the major floodgates have been open to enable tidal flushing of canals to help with weed control and to reduce stagnation. The process also allows for fish passage in and out of the canal system.

8 April 2017 Flood Repair Project update

Paula Chapman and Tony Dunlop spoke to the report provided in the agenda pack and delivered a presentation showing progress with the April 2017 Flood Repair Project.

Key points included:

- As at end of February 2020, 61% of repair sites across the region have been completed.
- 100 sites, from a total of 224, in the Rangitāiki-Tarawera Rivers Scheme have been completed to date (41%).
- Work on 78 Rangitāiki-Tarawera sites is programmed in 2019-2020, and 26 have been completed to date.
- Progress in this scheme has been hampered due to constrained rock supply in the Eastern Bay of Plenty. The availability of suitable rock material continues to remain a concern. Currently have two suppliers providing as much material as they can and still need to stockpile rock over a number of weeks before having enough to start a job.
- As a result of the constrained rock supply the project's forecasted expenditure to June 2020 is \$3m lower than budget and it is likely that the completion date for this project will go beyond the initial four year programme period.
- Council has initiated a rock procurement strategy project looking at different supply options to enable the creation of a supply chain for the next 20-50 years. Investigations have also taken place identifying the quality of rock throughout the region. A recent Request for Information process has resulted in interviews with local quarry operators and a number of options have been suggested for consideration.
- Total recoveries received from central government (Ministry of Civil Defence and Emergency Management) is close to \$7m. Have also received two insurance progress payments totalling \$3m.
- Development of the community open space on College Road, Papa Taonga, is complete and the site was officially opened at a ribbon cutting ceremony on 21 December 2019. Members expressed disappointment that the site is not being looked after. The grassed areas are overgrown and weedy, and many of the newly planted trees have died.

9 Engineering update

Mark Townsend took the Engineering agenda report as read and responded to questions.

- Mark explained that the draft Cardno report is currently with Trustpower for consideration and comment, and an initial meeting is scheduled for the end of next week.
- Peter Askey asked for a timeframe for when the Rangitāiki spillway design would be shared with affected landowners. Mark explained that only a high level philosophy was required for the resource consent application and the detailed design is still in progress.

Mark delivered a presentation focusing on the River Scheme Sustainability Project and Stage 6 of the Rangitāiki Floodway Project.

9.1 River Scheme Sustainability Project

- The River Scheme Sustainability Project's vision is to have a 100 year sustainable river management strategy which achieves: a reduction in flood risk, environmentally and

economically sustainable land use practices, adaptation to climate change, stakeholder support and engagement, and affordability.

- The project is currently in the analysis phase (Phase 3). For the Rangitāiki catchment this involves the analysis of 33 mitigation options, grouped into 11 themes, determined during the optioneering phases. The 11 themes are: retention and detention, ponding areas, flow diversion, making room for the river, converting pasture to wetlands, land use control, managed retreat, ecological corridors, farm management practices, sediment management, and gravel management.
- The presentation showed retention scenarios utilising Matahina and Aniwhenua dams and taking into account climate change. Two scenarios were described:
 - Scenario 1 – continue like we currently are, carbon footprint continues to increase and global average surface temperatures continue to increase.
 - Scenario 2 – globally we make changes that have a positive effect on global average surface temperatures.
- Currently the dams play an important role in managing floods in the Rangitāiki River and the presentation showed that future climate change effects could be managed by retention in the dams up to an average surface temperature increase of 1.64°C, which under Scenario 1 is predicted to be around the year 2050.
- Options post a 1.64°C temperature increase were also discussed.

9.2 Rangitāiki Floodway Project – Stage 6

- Stage 6 involves increasing stopbank heights along the section of the floodway immediately downstream of SH2/Awakeri Road at Edgecumbe. A total of 6.5 km of stopbank is proposed to be raised, along with associated drainage and infrastructure changes.
- The East Bank Road ponding area option has been dropped. East Bank Road is not high enough to make this option viable without also having to raise stopbanks, and therefore this option does not result in any cost savings.
- New modelling for Stage 6 has shown that stopbanks will need to be raised by 750 mm. This is more than initially proposed and consequently the cost of the work is going to be substantially more than the current budget of \$2.6m.
- The impact on rates is yet to be determined. Mark had hoped to be able to present the financial implication figures to the group however the finance team is still working through the implications. A request was made for the information to be provided as \$/hectare so farmers can calculate the financial impact on a per hectare basis.

Attendance: Charles Harley, Paula Chapman and Tony Dunlop left the meeting at 12:53 pm.

10 Finance report

Kirsty Brown spoke to the finance report provided in the agenda pack and gave an overview of the scheme's revenue and expenditure for the six months ending 31 December 2019.

Key points included:

- The scheme currently has a total surplus of \$691,000.
- Total capital expenditure is currently lower than budget as work on the Rangitāiki Floodway has not yet started and the April 2017 Flood Repair Project is underspent.
- Flood Repair Project expenditure is forecast to be lower than budget due to limitations with rock supply. This will impact on total capital expenditure at year end.
- Total reserve funds available of \$2.4m. Annual depreciation goes into the Asset Replacement Reserve.
- Since 1 July 2019 the internal loan balance has increased by \$1.7m to \$35m.

- The scheme's assets as at 1 July 2019 are valued at \$105m. This is an increase of \$7m from the 1 July 2018 valuation.
- Members questioned whether there were any limits on borrowing with the scheme debt about 30% of valuation. Level of scheme debt is a concern.

11 Co-governance/community group updates

The March meeting of the Rangitāiki River Forum was postponed and has been rescheduled to Friday 3 April. These are public meetings, and meeting dates and agendas are available on the Council website <https://www.boprc.govt.nz/your-council/council-and-region/committees/rangitaiki-river-forum/>

Alison Silcock reported on a recent Rangitāiki River Forum field trip which included the eel transfer programme at Matahina Dam.

12 General business

12.1 Aniwaniwa delta gravel update

Bruce Crabbe provided an update on Aniwaniwa delta gravel issues and the work being undertaken to identify options and solutions.

Key points included:

- Modelling has been carried out by WSP to assess the benefits of gravel extraction from the delta. This work was joint funded by Southern Generation and the scheme. Results show there is some benefit if a significant amount of gravel is extracted.
- The plan is to put out a Request for Proposal to see if there is a market for the gravel and what the cost of extraction will be. The intent is that such extraction is cost neutral to the scheme. One option is extracting the gravel and stockpiling it for future use.
- Gravel extraction at this site is logistically challenging because of the type and size of machinery required, and there are concerns about machinery security. Also cannot operate from May to October when fish are migrating and spawning.
- Anne Tolley, MP for the East Coast, organised a meeting on 17 February with the Chairman and Chief Executive of Bay of Plenty Regional Council and the Chair of Southern Generation to discuss the issues. The two organisations will meet quarterly from now on. Southern Generation is committed to working with Regional Council to find a solution and have committed resources to achieve this.

12.2 Gravel management update

Mark Townsend spoke to the report provided in the agenda pack.

Most of the gravel extraction occurs in the Horomanga River. Historically there has been too much extraction in the upper reaches. To remedy this extraction has been suspended, from the confluence with the Ohutu River, to enable bed level recovery. In contrast there is too much gravel in the lower reaches, with the river bed perched in some places. Important to encourage gravel extraction from the right areas to return perched bed levels to acceptable levels. For extraction to be a successful management tool there also needs to be a market for the gravel. Currently the primary extraction is by Timberlands for forestry roading work.

12.3 **Review of Floodway and Drainage Bylaw 2008**

Kirsty Brown provided an update on the Floodway and Drainage Bylaw review.

Key points included:

- Informal consultation occurred in October and November last year and feedback from these sessions has been considered, and where appropriate included in the proposed bylaws. Staff appreciated the involvement of advisory group members in the workshop held in Whakatāne.
- A Statement of Proposal and proposed bylaws document are being presented at a Council workshop seeking approval to commence the formal consultation phase of the review.
- Proposed consultation timeline is: formal consultation 4 April to 4 May, hearings 26-28 May, deliberations 9 June, and adoption by Council 25 June.
- Formal consultation will include a mail out to affected landowners and a series of drop-in sessions around the region.

12.4 **Infrastructure insurance**

In 2009 Council moved away from the LAPP (Local Authority Protection Programme) to the BOPLASS shared service insurance programme to cover the 40% local government share of infrastructure replacement costs for natural disaster cover. A steady increase in premiums has been observed over the ensuing years. It is predicted that this pattern of increasing premiums will raise affordability issues.

The Rangitāiki-Tarawera scheme's infrastructure premium for 2019-2020 was \$228,000.

A review is proposed to look at alternative insurance options and determine the best way forward. Results from the review will be presented to advisory groups at the September meetings.

12.5 **Advisory group membership**

Kirsty Brown advised that the current members' three year appointment to the advisory group ends in September 2020. Council staff are pleased with how the advisory groups are working and are recommending that current members continue in their roles for a further three years (to September 2023). Members were advised that an email will be circulated seeking whether they wish to continue for another term or not. Any vacancies will then be advertised.

Hemi Barsdell closed the meeting with a karakia.

Meeting closed at 1:35pm

Action Sheet

Rangitāiki-Tarawera Rivers Scheme

11 March 2020

Action	Person Responsible	Completed	Comment
1. A planning workshop with advisory group members to be scheduled for April/May with draft budget information circulated well in advance of the workshop.	Hemi Barsdell	✓	LTP workshop with sub-committee was rescheduled to August due to Covid. The workshop was to take place on 13 August 2020. This was rescheduled to 21 August 2020 via Zoom.

MEMORANDUM



To: Rangitāiki-Tarawera River Scheme
Advisory Group

From: Mark Townsend
Engineering Manager

Date: 20 August 2020

File Ref: A3605969

Subject: Engineering update

1 2019/20 Capital Works Programme in Review

1.1 Rangitāiki River Overlay

<p>This work involved investigations to establish the cause of ponding at Reynolds Bend, East Bank Road (lower Rangitāiki River) during the April 2017 flood event. This included geotechnical investigations and subsequent overlay work.</p>	<p>Design and Construction completed on time and under budget</p> <p>Budget 2019/20: \$416,960</p> <p>Actual 2019/20: \$288,211</p>
--	---

1.2 Rangitāiki Floodway

<p>The Rangitāiki Floodway Project is a multi-stage project designed to take pressure off the flood-prone Rangitāiki River by diverting some of its flood flows and by reducing flood levels in the river from upstream of Edgecumbe to the river mouth. Work in 2019/20 focused on the completion of Stage 5 and the start of Stage 7. Stage 5 of the floodway is now complete, the major work included the new channel cut to the Rangitāiki River (bifurcation), the upgrade of Thornton Hall Road and associated bridge work. Stage 7 works started.</p>	<p>Stage 7 work will be completed in 2020/21</p> <p>Budget 2019/20: \$5,700,000</p> <p>Actual 2019/20: \$4,292,027</p>
--	--

1.3 Rangitāiki River Stopbank Upgrade (lower)

<p>This project involves stopbank raising on the left and right banks of the Rangitāiki River downstream of Thornton Road Bridge.</p> <p>Right bank works are complete. Left bank work will be undertaken in 2020/21. Progress was delayed by COVID-19 alert restrictions.</p>	<p>Upgrade work partly completed remaining work will be undertaken in 2020/21</p> <p>Budget 2019/20: \$1,198,756</p> <p>Actual 2019/20: \$190,000</p>
--	---

1.4 Rangitāiki Floodwalls

<p>This work involved the identification and options development to strengthen existing floodwalls on the Rangitāiki River.</p> <p>The identified sites are:</p> <ul style="list-style-type: none"> • 89-109 College Road • West Bank Road (by Greig Road) • Thornton Floodwall on East Bank Road <p>The Greig Road design work is complete and construction is scheduled for 2020/21. The design work for the remaining two sites will take place in 2020/21.</p>	<p>Floodwall upgrade project will continue into 2020/21</p> <p>Budget 2019/20: \$960,000</p> <p>Actual 2019/20: \$337,836</p>
---	---

1.5 Rangitāiki Drainage Scheme Renewals - Canal 109

<p>This work involved culvert renewal and stopbank widening work at Canal 109. This was undertaken by Draintech Ltd in line with the project budget and ahead of schedule.</p>	<p>Construction completed on time and under budget.</p> <p>Budget 2019/20: \$443,316</p> <p>Actual 2019/20: \$380,203</p>
--	---

2 Crown Infrastructure Partners - Funding

As part of the 2020 Budget, central government announced a package of infrastructure funding supported by the Crown Infrastructure Partners (CIP) to help kickstart the country's recovery post-COVID-19.

On 1 July 2020, it was announced that the funding package included approximately \$210 million for climate resilience and flood protection projects across New Zealand. Council has been advised that two Bay of Plenty Regional Council CIP applications which included a total of six infrastructure projects have been approved, in principle, and awarded 75% Crown contribution: thereby requiring 25% of local share funding. The Rangitāiki-Tarawera Rivers Scheme projects included are Rangitāiki Floodway Stage 6 and spillway, and Rangitāiki floodwalls.

Project	Description	Funding and Timing
<p>Rangitāiki River community resilience and flood protection</p>	<p>Rangitāiki Floodway – Stage 6 and spillway.</p>	<p>Total project cost estimate \$13.7 million.</p> <p>CIP funding could contribute approximately \$10 million. The remainder to be loan funded with repayments made by the Rangitāiki-Tarawera Rivers Scheme.</p>
<p>Rangitāiki Floodwalls resilience</p>	<p>Replacement of existing floodwalls on the Rangitāiki River.</p>	<p>Total project cost estimate \$3 million.</p>

CIP funding could contribute approximately \$2.25 million. The remainder to be loan funded and repaid by the Rangitāiki-Tarawera Rivers Scheme.

3 2020/21 Capital Works Programme – Update

3.1 Rangitāiki Floodway Stage 7 (Hydro Road to SH2/Awakeri Road)

Budget 2020/21: Construction \$1.35 million

Stage 7 contract works were awarded to Waitohi Contractors Ltd. Works commenced on site in late January with establishment works and seepage trenches. The project was able to continue through COVID-19 alert levels. Work on two of the three land parcels is complete. The last of the Stage 7 works is scheduled to commence in October.



Fig 1: Stage 7 works locations

3.2 Rangitāiki Floodway Stage 6

Budget 2020/21: Design, consenting and construction \$10.9 million

Stage 6 involves increasing stopbank heights along a section of the floodway downstream of State Highway 2 at Edgecumbe. In total 6.5 km of stopbank is proposed to be raised along with subsequent required drainage and infrastructure changes and this will be undertaken in three stages.

Specific public consultation was undertaken in mid-June. Rangitāiki-Tarawera River Scheme ratepayers were invited to a consultation event in Edgecumbe to talk about the increased costs to undertake Stage 6 of the project. The community invite was additional to the online targeted consultation undertaken during COVID-19 Level 3 and offered a face to face discussion and presentation from staff. The event was well attended with approximately 60 people. The feedback indicated that overwhelmingly the attendees agreed Stage 6 should proceed as presented and feedback on the spillway design was also positive. The majority also felt the consultation event was very worthwhile. This was an encouraging result for Council, knowing that despite the increased forecast cost to complete the Rangitāiki Floodway in its entirety, the community is supportive of the

work continuing. The burden of which has been substantially reduced by the recently announced CIP funding.

Stage 6a works have been tendered and are scheduled to be awarded in mid-September.



Fig 2: Stage 6a, 6b and 6c works locations

In the meantime, some preparatory work for Stage 6a has been underway including the replacement of a culvert underneath the stopbank. The replacement culvert is needed to provide for the extended stopbank footprint.



Fig 3: Stage 6a preparatory culvert works

3.3 Rangitāiki Floodway Spillway

Budget 2021/22: Design and consenting \$ incorporated in the Stage 6 budget

The spillway is the starting point for the Rangitāiki Floodway. The proposal is for a fixed crest spillway with radial gates. The spillway formed part of the Stage 6 consultation event and is well supported by the community. A consent application for the updated spillway proposal has been lodged and is currently being processed. It is noted that the physical works are programmed for 2021/22.

3.4 Rangitāiki River Floodwalls Upgrade

Budget 2020/21: Design, consent and construction \$614,000 (increased to \$1,200,000)

As a result of the April 2017 flood event and the subsequent Rangitāiki River Scheme Review a number of existing floodwalls were identified for investigation as to their structural and performance integrity. The sites are as follows:

- 89-109 College Road
- West Bank Road (by Greig Road)
- Thornton floodwall on East Bank Road

The projects involve replacing the three concrete floodwalls. Work will include comprehensive consultation and communications with the local Rangitāiki community, and resource consents including cultural impact assessments. Consent for the Greig Road work is currently being processed and the tender process has been completed. The contract is expect to be awarded this month with works beginning shortly after.

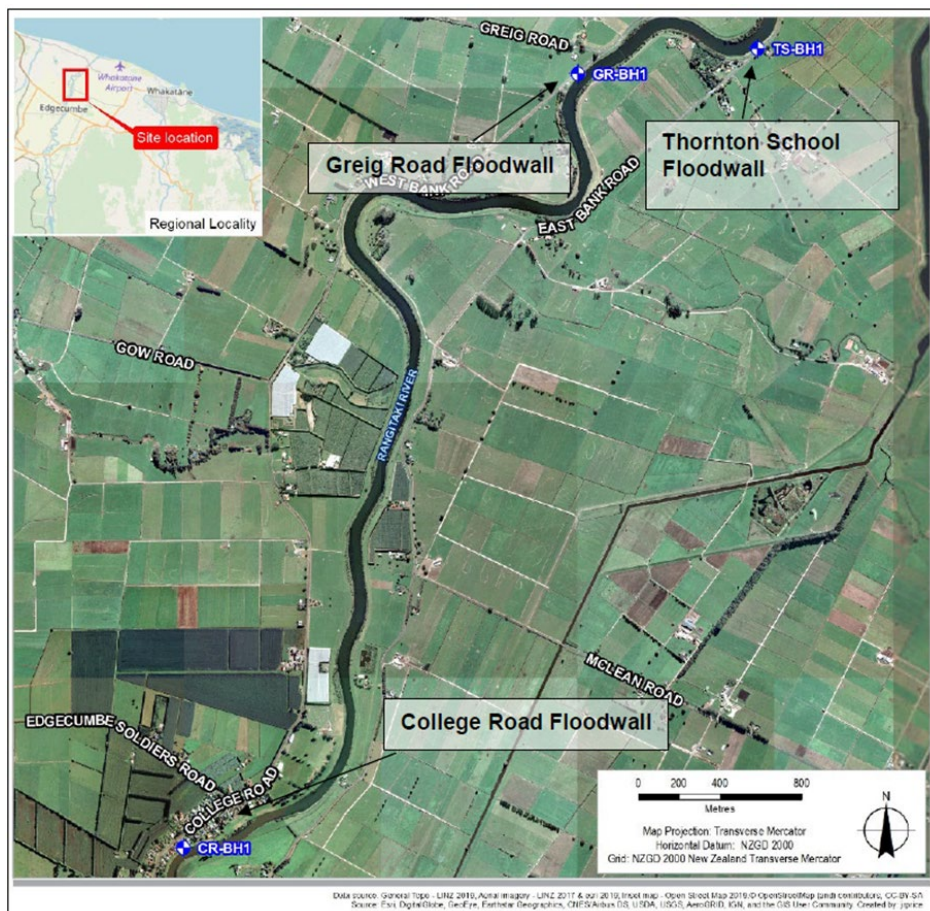


Fig 4: Rangitāiki floodwall locations

3.5 Lower Rangitāiki River Stopbank Upgrades

Budget 2020/21: Design and construction \$950,000

The project involves stopbank raising on the left and right banks of the Rangitāiki River below Thornton Road Bridge. Right bank works were completed in 2019/20 and left banks works are now scheduled to be completed this financial year. The project will increase the height of 1.2km of stopbank to improve levels of service. The geotechnical aspects of the stopbank structures are critical to the project.



Fig 5: Lower Rangitāiki stopbank upgrade works remaining - left bank

3.6 Rangitāiki River and Floodplain Modelling

Budget 2020/21: Modelling \$76,000

This work covers two financial years. It progressed well in 2019/20 to timeframes. Results are expected within the next two months.

The aim of the project is to build and run an hydraulic model of the river and floodplain to help assess river and stopbank capacity and system performance. The scope involves the entire Rangitāiki River catchment and Rangitāiki Plains Drainage Scheme.

Mark Townsend
Engineering Manager

MEMORANDUM



To: Rangitāiki-Tarawera River Scheme
Advisory Group

From: Mark Townsend
Engineering Manager

Date: 20 August 2020

File Ref: A3606509

Subject: Gravel extraction in the Rangitāiki-Tarawera River catchments

Gravel management in the Rangitāiki-Tarawera Rivers Scheme presently only occurs in the Rangitāiki River upstream of the Matahina Dam. No extraction is carried out in the reaches below Matahina or in the Tarawera River.

The principal extraction occurs in the Horomanga River. The Horomanga extraction is focussed on the reach in and around Galatea Road where the river is close to being perched in places. The estimated supply rate to the river is around 45,000 cubic metres per annum. Extraction quantities have increased in 2019 to the same level as was experienced pre-2016.

Horomanga River – gravel extraction 2017-2020

Year	Quantity Allocated m ³	Quantity Extracted m ³
2017	19,000	12,834
2018	30,000	20,400
2019	76,000	56,353
2020 (year to date July)	71,000	27,664

The primary interest in extraction is Timberlands who uses the material for forestry roading work, however there has been one allocation to Waiotahi Contractors Ltd in 2020 and a minor allocation to the Whakatāne District Council.

With the river bed severely perched above Galatea Road, it is expected that to achieve a desirable mean bed level of around 1 metre below surrounding farm land, extraction of about 270,000 m³ will be required in the 5.3 km reach experiencing aggradation in the lower river.

Extraction has been suspended in the upper part of the Horomanga River, from the confluence with the Ohutu River, to enable bed level recovery.

Extractions are minor in the Mangamate Stream, Jones Drywash and Ohutu Streams.

Jones Drywash, Mangamate and Ohutu Streams - gravel extraction 2017-2020

Year	Jones Drywash quantity extracted m ³	Mangamate Stream quantity extracted m ³	Ohutu Stream quantity extracted m ³
2017	16,519	26,492	23,920
2018	8,711	29,128	34,276
2019	22,638	0	0
2020 (year to date July)	4,265	0	0

Little gravel has been extracted from the Ruarepuae and the Whirinaki River in recent years.

Kopuriki Stream 2020

It is noted that this year gravel extractions have been approved for the Kopuriki Stream. Prior to 2020 the last allocation dates back to 2017. A total of 18,000m³ has been approved to date in 2020.

Mark Townsend
Engineering Manager

Rangitāiki - Tarawera Rivers Scheme: Routine Maintenance Works Programme: Financial Year 2020-2021

Date: 19/08/2020

Objective ID: A3566577

	Reach	Work Type	Location	Annual Cost	Job Estimate	Status
General						
		Annual Flood Damage allowance		\$200,000		
	R8	Rock works, Below Recorder	RB 6.3		\$30,000	
	R9	Upstream of SH30 Bridge	LB 18.2		\$60,000	
	R6	Rock Works [Mills]	L/B 6.7		\$60,000	
		Subtotal			\$150,000	
		Fly tipping and rubbish collection/disposal		\$8,000		In Progress
		All Reaches			\$8,000	
		Subtotal			\$8,000	
		Pest control		\$8,000		
	R1,2,8,10	Various			\$10,000	In Progress
		Subtotal			\$10,000	
		SUBTOTAL - GENERAL			\$168,000	
Lower Rangitāiki River						
		Riverbank weed spraying (where required)		\$8,900		
	R1	Pampas, blackberry, gorse, woolly nightshade	L & R/Bs		\$4,000	In Progress
	R2	Pampas, blackberry, gorse, woolly nightshade	L & R/Bs		\$4,000	In Progress
	R3	Pampas, blackberry, gorse, woolly nightshade	L & R/Bs		\$4,000	
		Subtotal			\$12,000	
	R1,2,3	Tree Clearing/mulching/layering		\$43,000		
		Various Sites, work in with F/Damage works			\$70,000	In Progress
		Subtotal			\$70,000	
		Planting/ Fish Habitat		\$22,200		
	R10	Gow's/ Box Planting	L/B 2.2		\$2,000	In Progress
	R10	Spot Planting Trial	L/B 0.9 to 1.6		\$500	In Progress
		Investigate planting site and plant	L & R/B		\$2,500	
	R1	Whitebait trial site/Planting	R/B8.1		\$4,000	
	R2	Plant Berm	L/B 11.5		\$1,500	In Progress
	R6	Planting Banks after repairs	L/B 7.1		\$10,000	
	R6	Fish Habitat/Planting [Land Management]	L/B 1.8		\$5,000	
	R2	Planting banks after repairs	R/B 22.0		\$4,000	In Progress
	R5	Planting [White Cliffs]	L/B 89.6		\$3,000	In Progress
		Subtotal			\$32,500	
		Rock replenishment		\$300,500		
	R10	Reid's Central, lower reaches			\$180,000	
	R1	Laws Corner [Investigate]	L/B 5.9		\$100,000	
		Subtotal			\$280,000	
		Fencing		\$22,500		
	R1,2,3	Various sites as required	L & R/B		\$20,000	As required
		Subtotal			\$20,000	
		Concrete floodwall sealant replacement:				
		College Rd	LB		\$8,000	
		Subtotal			\$8,000	
		Minor floodgates/Culvert inspection		\$9,500		
	R1	Floodgate annual inspection			\$2,000	In Progress
	R1	Floodgate desilting			\$2,000	As required
	R1	Floodgate maintenance			\$3,000	As required
	R1	Floodgate structure maintenance			\$3,200	As required
		Subtotal			\$10,200	
		SUBTOTAL - LOWER Rangitāiki			\$432,700	
Upper Rangitāiki River						
		Channel/riverbank weed spraying		\$27,000		
	R5	Gorse, pampas, blackberry	Various		\$5,000	
	R7	Gorse, pampas, blackberry	Various		\$5,000	
	R6	Gorse, pampas, blackberry	Various		\$10,000	
	R6	Gorse, pampas, blackberry	Various		\$3,000	
	R6	Gorse, pampas, blackberry	Various		\$3,000	
	R6	Gorse, pampas, blackberry	Various		\$3,000	
		Subtotal			\$29,000	
		Tree clearing/mulching/layering/burning		\$101,700		
	R4,5,6,7	Various sites to be determined			\$140,000	
		Subtotal			\$140,000	
		Channel maintenance, realignment		\$344,000		

76	Whirinaki River	R7	Various sites [Late summer]	L & R/Bs		\$70,000	
77	Rangitāiki River	R5	Various sites	L & R/Bs		\$70,000	
78	Ohutu Stream	R6	Gryone wire rope sites, Various	L & R/Bs		\$30,000	
79	Mangamate Stream	R6	Various sites	L & R/Bs		\$10,000	Completed
80			Subtotal			\$180,000	
81							
82			Planting poles			\$53,400	
83	Rangitāiki River	R4,5,6,7	Various sites, and recheck last years poles			\$50,000	
84			Subtotal			\$50,000	
85							
86			Rock/rubble/ trenched willows			\$37,800	
87		R4,5,6,7	After site inspections			\$100,000	
88			Subtotal			\$100,000	
89			SUBTOTAL - UPPER Rangitāiki			\$499,000	
90							
91	Tarawera River						
92			Riverbank weed spraying			\$7,100	
93		R8	Pampas, blackberry, gorse, woolly nightshade	L & R/Bs		\$10,000	
94		R8	Spraying glyceria on hard corners [Reduce bank erosion]	L & R/Bs		\$3,000	Completed
95			Subtotal			\$13,000	
96							
97	Tarawera River		Tree mulching/clearing/layering			\$21,300	
98		R8	Mulching downstream SH30 Bridge, [Various]			\$30,000	
99		R9	Various sites as required, trees in river			\$15,000	
100			Subtotal			\$45,000	
101							
102	Tarawera River	R8	Planting			\$11,000	
103	Tarawera/Waikamihi	R8	Planting site on river berm	L/B 9.0		\$2,500	In Progress
104	Tarawera/ORC	R8	Downstrea ORC pump berm	R/B 0.3		\$2,500	Completed
105	Tarawera below Bridge	R8	Extend fish Habitat [Land Management]	R/B 0.6		\$2,500	
106			Subtotal			\$7,500	
107							
108			Rock replenishment (where required)			\$50,900	
109		R8,9				\$30,000	
110			Subtotal			\$30,000	
111							
112			Fencing			\$1,200	
113		R8 & 9	Various sites as required	L & R/B		\$3,000	Partially completed
114		R8	Minor floodgate inspections			\$700	
115			Subtotal			\$4,000	
116			SUBTOTAL - TARAWERA			\$99,500	
117							
118	Reach 10 Canals, Awaiti, etc.						
119	Omeheu Canal	R10	Raising bank low spots - Poplar Lane	R/B 6.2 to 6.9		\$40,000	In Progress
120			Subtotal			\$40,000	
121							
122			Pump Inspections			\$1,000	\$1,000
123	Old Rangitāiki Channel		Pump six month inspection			\$700	\$1,000
124	Pump Station		2.5 year maintenance			\$0	
125			5 year maintenance			\$2,600	
126			Ancillary maintenance			\$5,000	\$4,000
127			Electricity			\$2,000	\$4,000
128			ORC Outlet Repairs	R/B 0.0		\$8,000	
129			Subtotal			\$18,000	
130							
131		R8,10	Floodgate inspections			\$4,100	
132			inspections and minor maintenance			\$6,000	
133			Subtotal			\$6,000	
134							
135	Floodgates Replacement		Kope West F/gates x 2, Built in house [FFGs]			\$12,000	In Progress
136			Subtotal			\$12,000	
137							
138			Canal bank weed spraying			\$1,800	
139	Kope West S/Banks	R10	Pampas, blackberry, gorse	Various		\$1,500	
140	Reid's Central S/banks	R10	Pampas, blackberry, gorse	Various		\$3,000	
141	Omeheu/Awaiti S/Banks	R10	Pampas, blackberry, gorse	Various		\$2,500	
142			Subtotal			\$7,000	
143							
144	Stopbanks	R1,2,3,8,10	Stopbank miscellaneous maintenance			\$12,400	
145			After Condition Assessment report			\$20,000	
146			Subtotal			\$20,000	
147			SUBTOTAL - REACH 10 CANALS, AWAITI, ETC.			\$103,000	
148							
149	Annual Maintenance Budget					\$1,108,300	
150	Annual Flood Damage Repair Allowance					\$200,000	
151	Overall Maintenance Budget					\$1,308,300	
152	Total Scheduled Annual Maintenance Estimate					\$1,302,200	

Flood Repair Project

Two extreme weather events in early April 2017 brought prolonged torrential rain to the Bay of Plenty. The resulting record high river levels and extensive flooding caused significant damage to river and drainage networks and assets across the region.



Repairing the damage



520
repair sites



Total budget
in excess of
\$45m



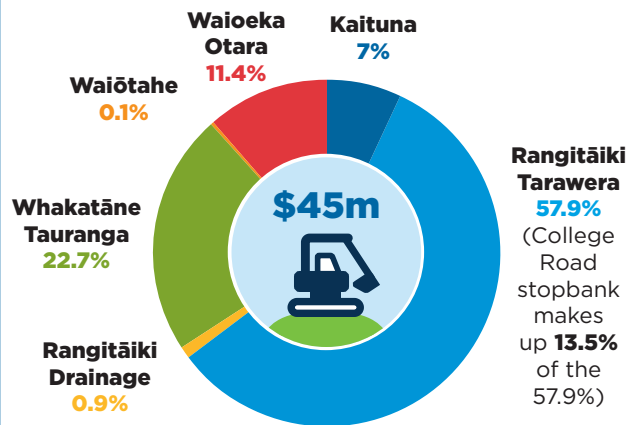
All repairs to
be completed by
30 June 2022

84% of **high priority** sites
are complete

We're repairing the
damage to protect our
**people, property
and livelihoods**

Repair costs by River Scheme

The **Rangitāiki-Tarawera Rivers Scheme**
was the worst affected, accounting for
more than half the repair budget.



Tracking our progress

Rangitāiki Tarawera 224 sites 127 complete ✓	Whakatāne Tauranga 108 sites 73 complete ✓	Waiōeka Otara 59 sites 58 complete ✓	Rangitāiki Drainage 53 sites All sites complete ✓
Kaituna 45 sites 29 complete ✓	Waiōtahe 31 sites All sites complete ✓	College Road stopbank realignment Complete ✓	Rangitāiki Drainage pump station repairs Complete ✓

373 SITES 72%
completed as at **30 June 2020**

What's happening in 2020-2021



2020-2021 budget

11.3million

To complete:

93% of all sites

100% of high priority sites

110 Repairs to further sites across the region

MEMORANDUM



To: Rangitāiki-Tarawera Rivers Scheme
Advisory Group

For period 1 February to 31 July 2020

From: Paula Chapman
Project Manager - Flood Recovery

Date: 18 August 2020

File Ref: A3605105

Subject: Status Report - April 2017 Flood Repair Project

April 2017 flood event - background

In early April 2017, the Eastern Bay of Plenty was hit by ex-Tropical Cyclone Debbie. The cyclone brought with it prolonged torrential rain, resulting in rising river levels across all the rivers and waterways in the region. The cyclone dropped considerable rainfall over the entire Bay of Plenty region which produced record high river levels and flows. In the Rangitāiki, flows reaching the Matahina Dam were 20% higher than ever recorded. Flows in the Whakatāne River were captured as 34% higher than previously recorded.

The event resulted in significant damage to river and drainage networks and assets across the region, from the Kaituna in the west through to the Waioeka-Otara catchment in the east.

1 Programme update

1.1 Programme update summary

- The flood recovery project is now in its fourth year of the estimated four year programme. Physical repair works have been steady across the programme as conditions and material availability have allowed. Favourable weather, good ground conditions along with unconstrained material supply will see the entire programme completed by 30 June 2021, however it is more likely that there will be a small number of sites that will be carried over for completion in the 2021/22 year.
- As at 31 July 2020, 399 site repair works are complete from the total programme of 520 sites. This work includes many of the highest priority works. In the case of the Rangitāiki-Tarawera Rivers Scheme, 152 sites from a total programme of 224 sites have either been completed (or identified as no longer required). Only one site remains to be completed on the Tarawera River. While the overall programme has been hampered due to the constrained rock supply in the Eastern Bay of Plenty, progress remains steady.
- The process for claiming eligible costs from central government is well established. Current claims are for essential infrastructure repairs. Claim 12 was received in June and Claim 13 is currently being drafted. The total amount received from central government to date is over \$8.5 million.
- Two progress payments for Infrastructure Insurance have been received totaling \$3,000,000.

- Communication and stakeholder engagement has been a feature of the project due to the high level of public and stakeholder interest in the recovery from the April 2017 floods, and this will continue.
- Repairs have been completed at the Te Rahu Pump Station which means the Material Damage insurance claim for all pump damage can be finalised.

1.2 Environment and heritage

- Priority assessment has occurred for known sites of cultural significance. Staff continue to liaise with iwi and hapu stakeholders to inform site works.
- Works comply with the Regional Natural Resources Plan, Bay of Plenty Regional Council policies and bylaws for the Rivers and Drainage activities.
- The project team is working with Coastal Catchments (Land Management) to identify opportunities to work together to increase inanga and tuna habitat.

1.3 Quality

- Sections of river are re-inspected prior to developing the detailed work scope for each site. Job specifications and design are included as part of a standard approval and procurement process. Due to the passage of time, more often than not high priority sites are showing increased levels of damage compared to initial assessments and estimates. Inspections are also identifying lower priority sites that have self-healed.
- Job completion includes the capture of new or repaired assets into Council's Asset Management System.
- Dedicated administration resource has supported the planning, procurement and funding recovery process.

1.4 Communications, community and stakeholder engagement

- An increase in Regional Council communications staff resource has supported the delivery of the project. Council continues to input into the regular established newsletters, such as the Edgecumbe Collective Newsletter and the Regional Council website to keep the community informed on work plans and progress. The project page is available on Council's website and interested people can follow the page to ensure they receive regular updates <https://www.boprc.govt.nz/floodrepairs>.
- The legalisation of the various titles that make up the reconstructed stopbank, road and community space on College Road, Edgecumbe is underway. The community space "Papa Taonga" will remain in BOPRC ownership with a License to Occupy offered to the Whakatāne District Council to ensure the open space is available and maintained for the benefit of the local community. Bay of Plenty Regional Council approved a grant of \$100,000 to the Edgecumbe Collective for the development of the site. This has now been paid to the Whakatāne District Council who managed the development works on behalf of the Collective.

1.5 Procurement

- Work to date has centred mostly on high priority repair projects. The total programme is made up of multiple smaller projects and these have been delivered utilising established Rivers and Drainage Panel Supplier contract agreements. The panel approval process ensures contractors are capable of the work and hold the necessary accreditations and insurance cover.
- The lack of suitable graded rock supply has constrained the programme of works in the Eastern Bay of Plenty, particularly work on the Whakatāne and Rangitāiki Rivers.

- Alan Rust Quarry (Te Mahoe) and Ywarri Quarry continue to supply the lower Rangitāiki sites. Staff are exploring the use of rock from Rainbow Mountain Quarry for remaining upper Rangitāiki River works. New suppliers may come on stream later in 2020 to support the summer construction period.

1.6 Programme Delivery

A total of 520 sites have been identified in the repair programme across the region, 224 are associated with the Rangitāiki-Tarawera Rivers Scheme.
Across the programme 399 sites have been completed, 152 of these are in the Rangitāiki-Tarawera Rivers Scheme.
The full programme of desilting and drainage bank repairs across the Rangitāiki Drainage network is complete.
110 sites are targeted for completion in the 2020/21 year, 67 of those are in the Rangitāiki-Tarawera Rivers Scheme.
Total programme completion date remains at 30 June 2021 however there may be a small number of sites carried over to the following year.

Key sites completed this period:

- A total of seven Rangitāiki River sites in the area from Tanekaha Street to the Go Kart club in Edgecumbe, both banks.
- A total of 13 Tarawera River sites.

Key sites underway include:

- RT122 and RT336 Warbricks, river distance 16.0km and 16.7km, right bank, repair of existing rockwork and extension of the rock erosion protection.
- RT212 Silcock River distance 87.4km, 130lm rock work, existing trench willow asset.



Photo 1: RT122 and RT336 locations

Key sites planned include:

- RT231 Mills, Horomanga River, river distance 7.2km 200lm rock work, no existing asset.
- RT120 Lawrence, river distance 13.5km, right bank, significant rock erosion protection work at a site without any significant existing assets.
- RT323, RT324 BOPRC lease and substation at river distance 12 and 12.6km, right bank, significant rock erosion protection work, some existing assets.

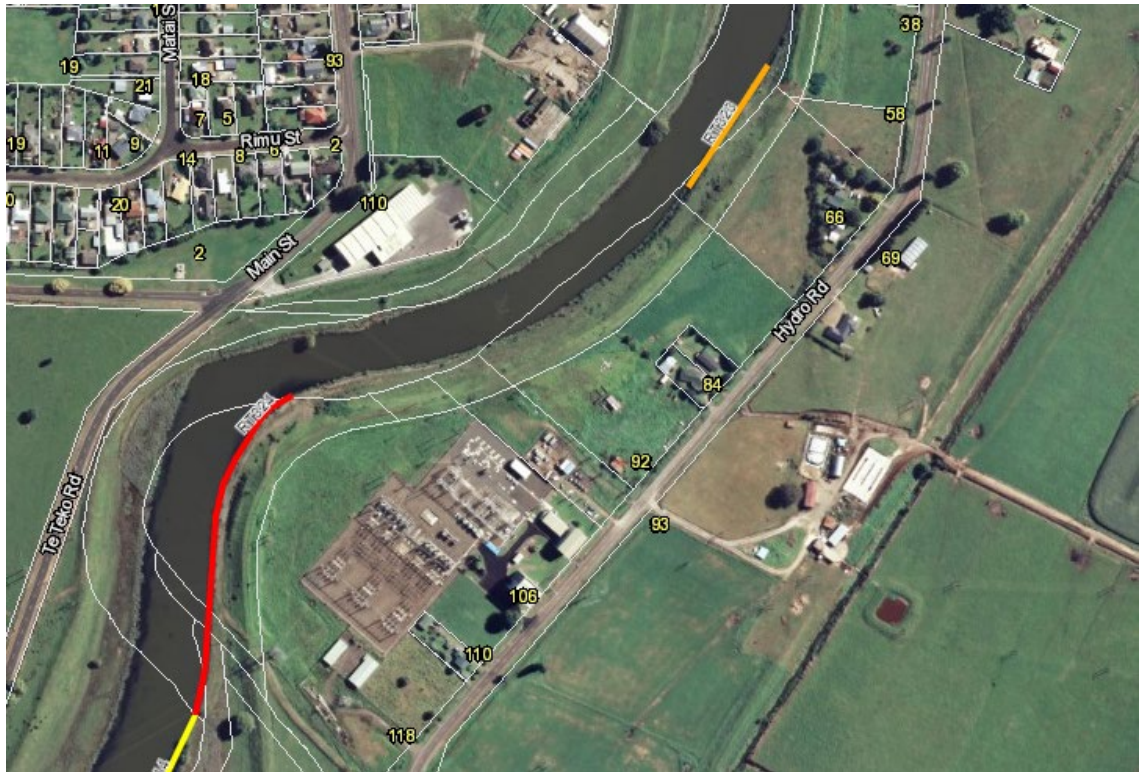


Photo 2: RT323 and RT324 locations

1.7 Financial

Rangitāiki-Tarawera Rivers Scheme repair estimate

Estimated total programme cost - Rangitāiki-Tarawera	\$26,000,000
Estimated betterment value	\$13,000,000

2017/18 - budget vs actual

Expenditure budget - for infrastructure works	\$5,504,854
Total expenditure at 30 June 2018 – for infrastructure works	\$6,707,296

2018/19 - budget vs actual

Expenditure budget - for infrastructure works	\$5,497,800
Expenditure at 30 June 2019 - for infrastructure works	\$5,320,620

2019/20 - budget vs actual

Expenditure budget - for infrastructure works	\$5,941,680
Expenditure at 30 June 2020 - for infrastructure works	\$3,040,514

2020/21 - budget vs actual

Expenditure budget - for infrastructure works	\$7,300,000
YTD Expenditure at 31 July 2020 - for infrastructure works	\$76,289

2 Programme Risks and Issues

Risk/Issue	Description	Action/management	Owner
Ground conditions	Wet conditions restrict work programme	Undertake soft engineering works and rock stockpile work during winter months	BOPRC
Weather	Future weather events will exacerbate damaged sites	Complete site works in priority order as this factors in risk and consequence	BOPRC NEMA Insurer
Weather	Severe weather event may cause new damage	Review works programme against new works (annual flood damage)	BOPRC NEMA Insurer
Rock material availability	Suitably graded rock supply is restricted and the operating environment is variable	Working with new rock sources to supply suitable material for outstanding works Encourage new rock sources to enter Council's prequalified panel supplier schedule Investigate opportunities to support new quarries in the Eastern Bay of Plenty	BOPRC
Resource	Staff resource is limited for oversight of onsite works	Use inhouse resources (Area Engineers) to supervise site works Additional contract resource for rock grading/audits and new asset capture	BOPRC
Programme length	Property owners want works associated with their property undertaken first	Implement communications and engagement plan Direct communication with property owners	BOPRC
Insurance	Claim limits for individual works are not known	Aon insurance specialist supporting claim process	BOPRC Aon
Cost	Cost exceeds budget	Work closely with NEMA and insurers, maximise contributions from other stakeholders	BOPRC Aon NEMA Insurer

3 Recoveries

- Loss adjustors have been assigned for the infrastructure claim and the material damage claim. Staff are working with insurance specialists Aon to progress the insurance claims process to date. Staff met with our insurance specialists recently to consider the remainder of the programme and early settlement possibilities.
- The project team are working with the central government National Emergency Management Agency (NEMA previously MCDEM) representatives and are comfortable with the process and speed of recoveries to date.

- Recoveries to date specifically related to Rangitāiki-Tarawera Rivers Scheme flood repair works amount to \$6,889,298.

4 **Expected progress within the next six month period**

- Complete 80% of Rangitāiki-Tarawera Rivers Scheme work.
- Draft and receive MCDEM Claim 13.
- Lodge Material Damage pump station repairs claim.

Paula Chapman
Project Manager – Flood Recovery

Bay of Plenty Regional Council - Toi Moana - Rivers Advisory Group

Statement of revenue and expense: Rangitaiki-Tarawera Rivers Scheme

For the 12 months ending 30 June 2020 (draft)

Run: 12-Aug-2020

Variance Indicators					
Low		Medium		High	
<10%	▶	10% to 30%	▶	>30%	▶

	2019/20		Variance			Variance comments	2020/21
	Budget	Actual	\$	Variance indicator	Annual		
	\$000				Plan		
Operating revenue by class							
1	General rates	443	443	0	-	▶	397
2	Targeted rates	4,428	4,428	0	-	▶	3,830
3	External interest income	13	0	(13)	Lower	▶	22
4	Other revenue	86	287	202	Higher	▶	87
5	Fees and charges	12	0	(12)	Lower	▶	12
6	Investment income	667	667	0	-	▶	564
7	Total revenue	5,647	5,824	177	Higher		4,912
Operating expenditure by class							
8	Administration expenses	3	15	(12)	Higher	▶	3
9	Grants and subsidies	0	106	(106)	Higher	▶	0
10	Other expenses	402	363	39	Lower	▶	421
11	Consultancy fees	0	31	(31)	Higher	▶	0
12	Contract work	724	831	(107)	Higher	▶	739
13	Finance costs	1,822	1,420	402	Lower	▶	1,065
14	Depreciation and asset disposal	281	281	0	Lower	▶	565
15	Subtotal - expenditure	3,232	3,046	185	Lower	▶	2,793
16	Net overhead charges and recoveries	735	583	152	Lower	▶	0
17	Total operating expenditure	3,967	3,630	337	Lower	▶	2,793
18	Total operating surplus (deficit)	1,680	2,195	514	Favourable	▶	2,119

This includes trustpower contributions (\$255K), grazing licences (\$10k) and other third party recoveries

This includes additional rate payments that were not budgeted

This includes the Paptonga development contribution made to Whakatāne District Council
Higher premiums for infrasturural insurance

Additional works undertaken
Lower capital spend resulting in lower borrowing costs.

Bay of Plenty Regional Council - Toi Moana - Rivers Advisory Group

Statement of revenue and expense: Rangitaiki-Tarawera Rivers Scheme

For the 12 months ending 30 June 2020 (draft)

Run: 12-Aug-2020

Variance Indicators					
Low		Medium		High	
<10%	▶	10% to 30%	▶	>30%	▶

2019/20		Variance		Variance comments	2020/21
Budget	Actual	\$	Variance indicator		Annual
\$000					Plan

Capital revenue by class

	Capital funding	2,128	3,204	1,076	Higher	▶	Additional recoveries for 2017 flood damage repairs due to the work programme being ahead of schedule.	2,128
19	Total capital revenue	2,128	3,204	1,076	Higher			2,128
20	Total surplus (deficit)	3,808	5,398	1,591	Favourable	▶		4,247

Capital expenditure by project

	Revised Budget	Actual	\$	Variance indicator		Annual Plan
Rangitaiki Tarawera Flood Damage Repairs	2,650	3,034	(384)	Higher	●	7,300
Rangitāiki River (stopbank upgrade)	249	190	59	Lower	●	950
Rangitaiki Floodway	4,350	4,307	43	Lower	●	12,262
Rangitaiki River overlay	417	288	129	Lower	●	0
Rangitāiki River modelling	240	206	35	Lower	●	76
Rangitāiki floodgates	0	0	0	-	●	614
Rangitāiki Floodwalls	346	338	8	Lower	●	0
Total capital expenditure	8,252	8,363	(111)	Higher	▶	21,202

Bay of Plenty Regional Council - Toi Moana - Rivers Advisory Group

Statement of revenue and expense: Rangitaiki-Tarawera Rivers Scheme

For the 12 months ending 30 June 2020 (draft)

Run: 12-Aug-2020

Variance Indicators					
Low		Medium		High	
<10%	▶	10% to 30%	▶	>30%	▶

2019/20		Variance		Variance comments	2020/21
Budget	Actual	\$	Variance indicator		Annual
\$000					Plan

Reserves

	Opening Balance	Movement	Closing Balance	
Flood Damage Reserve	-	193	193	Funds available
Asset Replacement Reserve	3,786	1,905	5,691	Funds available
Works Reserve	161	583	743	Funds available

Internal Loans

	Opening Balance	Movement	Closing Balance
Loans	33,456	6,277	39,733

1/07/2019 Movement 1/07/2020

Asset Revaluation

105,560	
---------	--

Annual valuation currently underway

MEMORANDUM



To: Rangitāiki-Tarawera Rivers Scheme
Advisory Group members

From: Kirsty Brown
Rivers and Drainage Assets Manager

Date: 25 August 2020

File Ref:

Subject: General Business Report

Following items are to be discussed under the General Business section:

1 **Infrastructure Insurance Review**

Local authorities have a unique arrangement with central government where in the event of a natural disaster, central government will pay up to 60% of repair costs for essential infrastructure. This arrangement is conditional on the local authority being able to show that the damaged assets had been properly maintained and that the local authority can meet the remaining 40% through other means e.g. by setting aside reserves or insurance.

In 2009, Council moved away from the Local Authority Protection Programme (LAPP) scheme to the Bay of Plenty Shared Services Ltd (BOPLASS) joint insurance procurement forum, to cover the 40% local authority share of infrastructure restoration costs resulting from a natural disaster.

This insurance cover is obtained on the London market by the BOPLASS insurance broker's Aon via their inter-LASS initiative which includes 24 councils. It covers Council's flood protection and drainage assets for damage caused by earthquake, natural landslip, flood, tsunami, tornado, volcanic eruption, hydrothermal and geothermal activity, subterranean fire and business interruption.

At the March 2020 round of advisory group meetings, we advised that due to the steady increase in infrastructure insurance premiums over the years and the likelihood this pattern will continue, we would be doing a review of how we insure our flood protection and drainage assets.

These increases are mainly due to market conditions and the significant increase in asset value. Changes to asset value are due to:

- Increased construction costs.
- Creation of new assets and betterment to existing assets through the April 2017 Flood Repair Project.

- Significant Long Term Plan/Annual Plan capital works programme.
- Improved asset data.

Based on learnings from the April 2017 Flood event, our 2019/2020 insurance cover was increased to allow for repair costs over and above individual asset values, e.g. site preparation works, demolition, debris removal, access tracks and land reinstatement.

The below table shows the increase in Rivers and Drainage insurance asset value and insurance premiums over the past four years for our five major rivers and drainage schemes.

	2016/2017	2017/2018	2018/2019	2019/2020
Infrastructure annual premiums	\$185,000	\$390,000	\$468,000	\$725,000
Insurance asset replacement value (rounded)	\$120,800,000	\$227,760,000	\$313,100,000	\$460,000,000

A workshop between Council staff and Aon representatives was held on 30 July 2020. As a result, Aon will be carrying out a frequency loss assessment which involves identifying and analysing the loss exposures for the rivers and drainage assets, as well as examining the feasibility of management techniques such as whether self-insurance is an appropriate and cost-effective option. Other ways to manage risk, e.g. capacity to borrow to fund any loss or damage, will also be examined.

It should be noted that Council have been advised that the impact of COVID-19 on the London market may result in a premium increase of up to 15%.

2 **Proposed Flood Protection and Drainage Bylaws 2020 update**

The Flood Protection and Drainage Bylaws are regulations that safeguard flood protection and land drainage assets from third party damage or misuse. As required by the Local Government Act 2002, the Bylaws have been under review since 2019 (last review was in 2008). This is to ensure they are still fit-for-purpose and informed by the latest science and recent flood information.

Formal consultation for the proposed Flood Protection and Drainage Bylaws 2020 opened on 27 March 2020, just days prior to New Zealand entering COVID-19 Alert Level 4. At that stage, Council had no legal ability to extend the 30 June 2020 deadline where the 2008 Bylaws would automatically be revoked. This would have meant that by 30 June 2020, Council would have had no legal protection for its flood protection and drainage assets. Council had no other option but to continue the formal consultation process during lockdown.

During Alert Level 4, central government enacted the COVID-19 Response (Further Management Measures) Legislation Act 2020. This provided temporarily legislation that suspended the automatic revocation date of 30 June 2020, allowing the 2008 Bylaws to remain in force until the adoption of the Flood Protection and Drainage Bylaws 2020. The hearings, deliberations and adoption were postponed until the following dates:

- Hearings: 26 August 2020
- Deliberations: 30 September 2020
- Adoption: 29 October 2020

This extension also provided Council the opportunity to address some matters raised during the consultation period regarding the effects of the Bylaws on traditional cultural practices and waahi tapu sites. An investigation is currently underway with targeted iwi, and a report to Council will be presented during Deliberations on 30 September 2020.

Submissions closed 28 April 2020 with a total of 43 submissions received. Fifteen organisations and individuals have advised they wish to be heard at the upcoming hearing.

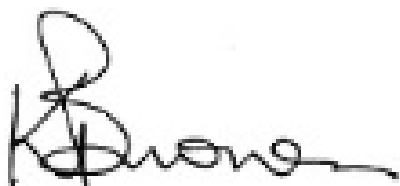
Further information on the proposed Flood Protection and Drainage Bylaws 2020 can be found on our website at <https://www.boprc.govt.nz/our-projects/flood-protection-and-drainage-bylaw-review>

3 **Advisory Group membership update**

As per the Terms of Reference for the advisory groups, the first three-year membership period is due to end in September 2020. Members were approached by staff to see who was interested in continuing. Both Graham Smeaton and Maurice Warbrick resigned from the group, resulting in one vacancy for an urban representative and one for a hill country representative.

As required under the Terms of Reference, the two vacancies were advertised via public notice in The Whakatāne Beacon and on our website.

The deadline for applications closed on Friday, 21 August 2020. A selection panel, consisting of Councillors Iti and Clark, Chris Ingle and myself will then review the applicants. The group will be advised once the successful applicant has been confirmed.



Kirsty Brown
Rivers and Drainage Assets Manager