



Rangitāiki-Tarawera Rivers Scheme Advisory Group Meeting

Wednesday 11 March 2020 at 10am

War Memorial Hall
Corner of Kauri and Main Streets
Edgecumbe

Rangitāiki-Tarawera Rivers Scheme Advisory Group Meeting

Wednesday 11 March 2020 at 10am

Agenda

- 1 **Welcome/karakia**
- 2 **Apologies**
- 3 **Notes of previous meeting held 11 September 2019**
- 4 **Matters arising from previous meeting**
- 5 **Performance assessment of critical assets**
- 6 **River scheme planning (Asset Management Plan, Long Term Plan)**
- 7 **Operations update**
- 8 **April 2017 Flood Repair Project update**
- 9 **Engineering update**
- 10 **Finance report**
- 11 **Co-governance/community group update**
- 12 **General business**
 - a. Aniwaniwa delta gravel update
 - b. Gravel management update
 - c. Review of the Floodway and Drainage Bylaw 2008
 - d. Infrastructure insurance
 - e. Advisory group membership September 2020 to September 2023

Notes of the Rangitāiki-Tarawera Rivers Scheme Advisory Group meeting held at Bay of Plenty Regional Council's Whakatāne office, on Wednesday 11 September 2019, commencing at 10am

Chair: Councillor Norm Bruning

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

BOPRC Councillors: Councillor Bill Clark, Councillor Tiipene Marr

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

Apologies: Mark Townsend (Engineering Manager), Shona Pedersen for lateness

1 Welcome

Councillor Bruning welcomed everyone to the meeting and Councillor Marr open the meeting with a karakia.

Chris Ingle advised that Kirsty Brown had been appointed as Assets Manager and introduced Charles Harley (Team Leader Eastern Catchments) and Andrew Pawson (Area Engineer – Rangitāiki-Tarawera).

2 Apologies

Apologies were received as recorded above.

3 Notes of previous meeting held 20 March 2019

Resolved

That the Rangitāiki-Tarawera Rivers Scheme Advisory Group:

- 1 Confirm the notes of the meeting held 20 March 2019 as a true and correct record.

**Bruning/Clark
CARRIED**

4 **Matters arising from previous meeting**

Kirsty Brown ran through the actions from the previous meeting.

- Positive feedback from members about the weekly work notifications.
- Flowchart of key planning input points for advisory groups was tabled.
- Water testing subsidy for farmers had been investigated and the suggestion forwarded to the policy team looking after the freshwater programme for consideration. Good to see that landowners want to be better informed about the status of water on their properties. The Upper Rangitāiki catchment (from the headwaters in Lochinver Station east of Taupō to the Wheao River confluence in Kāingaroa forest) and the Awakaponga catchment are going to be having focused water testing over summer.
- LAWA website useful site for water quality information <https://www.lawa.org.nz/>
- Rangitāiki river cross-section information (from the Galatea area) will be covered in General Business under the gravel management item.

Attendance: Shona Pederson joined the meeting at 10:16 am.

5 **Kopuriki Road flooding issues**

Kirsty Brown gave a verbal update on the Kopuriki Road flooding issues.

Key points included:

- A meeting was held 7 August, including representatives from Pioneer Energy and J Swaps, to discuss the issues at Kopuriki and the suggestion that the scheme obtain a resource consent for the ongoing commercial gravel extraction at the Aniwaniwa delta.
- The report from Swaps was not as commercially positive as initially advised and a decision about obtaining consent could not be made
- Since the meeting staff have:
 - Requested a written estimate from Mike Swaps of the different options he presented at the meeting.
 - Sought advice from Consents as to whether a one-off, large scale, extraction (about 20,000 cubic metres) could be undertaken under the Rivers and Drainage section's Resource Consent 64684 for out-of-scheme works. Initial feedback is that this is a possibility and when further information is available (like methodology and timing) it is recommended that the proposal be discussed further with the Consents section.
- An alternative option is to extract the gravel and store nearby for localised use on a cost recovery basis.

6 **Review of the Floodway and Drainage Bylaw 2008**

Kirsty Brown spoke to the report provided in the agenda pack.

Key points included:

- The Floodway and Drainage Bylaw is the key tool Council has to protect its flood protection and drainage assets from damage and misuse.
- Staff are currently reviewing the bylaw rules and assessing what changes will need to be made to ensure the rules, and supporting science and technical information, are still relevant and fit-for-purpose.
- Workshops with advisory group members will be organised for October/November, and proposed variations to the bylaw will be presented in detail.

- Two potential controversial changes will be: the possible extension of the bylaw applicable areas to ensure specific geotechnical issues are managed appropriately; and restrictions on ploughing, cropping and fencing in close proximity to stopbanks.

7 Operations update

7.1 Work programme update

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

Key points included:

- Using an excavator with a tree grab and shear to maintain willows provides a number of benefits – cut and stack quickly (no need to strop and drag), reduces health and safety risks associated with chainsaw use, easy to trim to a height that makes the regrowth out of the reach of stock, trees and debris don't fall into the river.
- Willow aphid damage not as visible this year, perhaps because it has been wet.
- Trialling geobags at three sites as an alternative to rock rip rap. These are cheaper than rock and use material from the site. Suitable for streams with low velocities. Trial sites performed well during the July flood event.

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

Key points included:

- There has been a couple of decent annual flood events this year and the annual flood damage budget is already almost fully committed.
- Drainage scheme work has been routine and is on budget.
- Discussed weed cutting versus weed spraying. Method used really depends on the waterway and the weed being targeted.

8 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:

- Two years through the four year project and 50% of sites across the region have been completed.
- Work in the Rangitāiki and Tarawera rivers is expected to take the full four years of the project. Completion by June 2021.
- 72 from a total of 224 sites in the Rangitāiki-Tarawera rivers scheme have been completed (32%). 78 sites planned for repair in 2019-2020, leaving 74 sites to be repaired in 2020-2021.
- Progress in this scheme has been delayed due to constrained rock supply in the Eastern Bay of Plenty.
- Programme's budget is on track. Expenditure at end of 2017-2018 was overspent and the programme was ahead of programme. Expenditure at end of 2018-2019 was underspent due to rock supply constraints.
- Cost recoveries are on track with \$9m recovered to date from Whakatāne District Council, NZTA, Ministry of Civil Defence and Emergency Management, and insurance progress payments. The repair work is being undertaken in a way that optimises

recoveries to off-set cost to the schemes and ratepayers. Expecting to recover approximately \$16m of the \$45m project.

- Regional Council has started a strategic sustainable rock supply project to ensure a secure and long-term rock supply is available.
- Working with the Edgcombe community and Whakatāne District Council to develop a reserve (Papa Taonga) on the College Road red listed properties. The land is owned by Regional Council, and Whakatāne District Council have a license to occupy. District Council is leading the project and a passive open space has been designed and approved by the community board. Development work is to start in October with an opening by Christmas.

9 Engineering update

Peter Hay took the agenda report as read and delivered a presentation focusing on the Rangitāiki Floodway Project.

Key points included:

- There has been on-going community engagement to keep the community informed during the investigation and planning stages for the last stages of the floodway upgrade. At a recent open day most attendees gauged their level of support in the range of 'support with reservations' through to 'fully support'.
- Council has purchased 266 Hydro Road – the property directly in front of the spillway.
- The current spillway will be replaced with a lower fixed crest weir with contingency radial gates. In the April 2017 flood event the spillway should have activated sooner, by incorporating radial gates into the spillway design flood managers can manually activate the gates if required.
- NorConsult NZ Ltd are currently modelling the spillway to determine how many radial gates will be required.
- The cost estimate for the spillway (including a 20% contingency) is \$2.8m and construction is planned for November 2020 to May 2021.
- Incorporating a ponding area, along East Bank Road, into the floodway design is no longer being considered and affected landowners have been advised of this.
- Stopbanks in the section from SH2 to McLean Road will be raised by 600-700mm.
- Council has approved additional capital expenditure of \$4.34m for the floodway in 2019-2020 (funded through loans). This money will be used to complete Stage 5 (channel bifurcation, bridge and wetland), start Stage 7 (channel widening and stopbank raising Hydro Road to SH2/Awakeri Road and spillway design), scope and cost Stage 6 (channel widening and stopbank raising SH2/Awakeri Road to McLean Road).
- Once preliminary designs are completed Council staff will meet with each affected landowner and work through any property specific issues and considerations.
- Stage 5 work is progressing well. Working on completing the bridge and approaches and then opening up the cut to the river. Wetland has been created and planted, and already a lot of bird and aquatic life present.

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 2018-2019 financial year, noting that the figures are draft until approved by Audit New Zealand and adopted by Council at their meeting on 26 September.

Key points included:

- Total revenue was \$4,374,000 - \$489,000 lower than budget due to no operational insurance recoveries being received.
- Total operating expenditure was \$3,431,000 - \$235,000 higher than budget.
- Capital revenue - made up of Ministry of Civil Defence and Emergency Management claim for flood repairs and a portion of insurance recoveries – was \$2.9m lower than budget as a result of delays with the April 2017 Flood Repair Project works.
- Capital expenditure was \$1.2m lower than budget. This is due to the April 2017 Flood Repair Project completing fewer repair sites than planned because of constraints with rock supply. The unspent budget will be transferred to 2019-2020.
- The scheme's flood damage reserve has been fully allocated.
- The scheme's works reserve has \$161,000 available.
- Outstanding loans of \$35m at the beginning of the year have been reduced by \$2m to \$33m.
- Asset valuation increased by \$20m, from \$77m to \$98m, as a result of higher construction costs and additional assets being created by the April 2017 Flood Repair project.

11 General business

11.1 Gravel management update

Paula Chapman spoke to the update provided in the agenda pack and presented the Rangitāiki River cross-section survey information.

Graphs were presented of three river cross-section surveys, from Rabbit Bridge up to the Horomanga River, showing data from 1992 to 2019. All cross-sections showed significant aggradation.

Attendance: Bill Clark left the meeting at 12:30 pm.

11.2 Stopbank damage from grazing

Kirsty Brown delivered a presentation on damage to stopbanks over winter. Several examples were shown of stopbanks that had been overgrazed to the extent that there was no grass cover, and the stopbank and batters were muddy, pugged and rutted from stock and vehicle movement.

Key points included:

- This year has been particularly bad with stock and vehicle damage to some of our stopbanks.
- Exposing the stopbank like this weakens its integrity, making it vulnerable to slumping and failure.
- Council relies on landowners to proactively manage stopbanks on their property and it is disappointing to see our community assets in this state.
- Damage to stopbanks is covered by the Floodway and Drainage Bylaw 2008.
- Remediation of the cases shown was paid for by the landowners and was achieved by immediately removing the stock, blading the ruts, re-seeding the exposed areas and covering the area with hay.
- A brochure 'Stopbanks – a community asset' has been produced and copies were provided to advisory group members.

11.3 Essential Freshwater

- Chris Ingle advised that staff are currently working through the implications for river scheme management as a result of the government's Essential Freshwater package released on 5 September. Anticipating that there will be a greater focus on water quality management, habitat management and ecosystem health. The river schemes are not currently funded for these areas of work.
- Scope of package includes – setting and clarifying policy direction, raising the bar for ecosystem health, supporting delivery of safe drinking water, better managing stormwater and wastewater, and improving farming practices.
- There will be funding implications for Regional Council and ratepayers.
- Tight submission timeframe with submissions closing 31 October. Regional Council will be making a submission.

11.4 Focus Catchments

Charles Harley spoke to the report provided in the agenda pack.

The Focus Catchments Programme is about focusing support and funding on water quality issues in the catchments that need our attention the most. Currently 12 catchments identified across the region with two within the Rangitāiki-Tarawera Rivers Scheme area – Upper Rangitāiki, Taupō (focusing on halting the increasing nitrate trend) and Awakaponga, Matatā (focusing on reducing N, P, sediment and *E. coli*). Land Management staff are in the process of developing monitoring plans for each of the focus catchments, detailing the monitoring required to measure changes in water quality. Monitoring will inform catchment management plans with the aim of bringing people together to collectively work on catchment issues. This process has already been used in the Waiōtahe Catchment with excellent results.

Charles also promoted the Ballance Farm Awards alumni symposium on 24 October in Te Puke. Symposium will cover issues like farm planning and the government's recently released Essential Freshwater package. Speakers include Members of Parliament, and staff from Ministry of Primary Industries and Ministry for the Environment.

11.5 Other general business

11.5.1 Kopeopeo Canal Remediation Project

At the request of members Bruce Crabbe provided an update on the Kopeopeo Canal Remediation Project.

Key points included:

- Dredging work has been completed and the flood protection and drainage systems are fully operational again. Observed that day-to-day drainage and flood conveyance has improved and that drainage levels are lower. This is a result of the amount of sediment removed.
- Work on 5.1km of canal was completed on 9 July 2019, and all tests were validated to remediation target by 12 July 2019.
- Topsoil capping of the containment cells still to be completed and the bioremediation phase started. Bioremediation enhances the natural degradation process using a combination of fungi, bacteria and plants that help speed up the natural degradation of the dioxins.
- There is still some contamination in the canal to the west of SH30. This area will be investigated, the extent of contamination determined, and best options for remediation presented to Council for consideration.

11.5.2 Rangitāiki River Forum

The group discussed the role and focus of the Rangitāiki River Forum. Focus is currently on dam management and fish passage, water quality, and pest management. The meetings are open to the public and meeting dates and agenda details are available on the website - <https://www.boprc.govt.nz/your-council/council-and-region/committees/rangitaiki-river-forum/>.

Alison Silcock is the Whakatāne District Council representative on the Forum and Councillors Bruning and Clark attend on behalf of Regional Council.

ACTION:

Future advisory group meeting agendas to have a standing item of Rangitāiki River Forum update.

Councillor Marr closed the meeting with a karakia.

Meeting closed at 1:16pm

Action Sheet

Rangitāiki-Tarawera Rivers Scheme

11 September 2019

| Action | Person Responsible | Completed | Comment |
|---|--------------------|-----------|---------|
| 1. Future meeting agendas to have a standing items of Rangitāiki River Forum update | Jo | ✓ | |

MEMORANDUM



To: River Scheme Advisory Groups

From: Hemi Barsdell
Asset Management Specialist

Date: 11 February 2020

File Ref: A3474745

Subject: Long Term Plan 2021-2031, Infrastructure Strategy 2021-2051, and Rivers and Drainage Asset Management Plan 2021-2071

Purpose

To inform Advisory Group members of the coming planning processes and to seek feedback.

Feedback Sought

Advisory Group members to inform Council staff around how they would like to contribute to the planning processes.

PLANNING PROCESSES

Long Term Plan (LTP) 2021-2031

The Long Term Plan (LTP) is Council's key strategic document. It sets out Council's priorities for the next ten years, including what will be done, how much it will cost and how it will be funded. It is reviewed every three years to make sure it is still relevant and accurate.

Planning will be undertaken throughout the current calendar year to determine the draft LTP 2021-2031. The process, including timelines is yet to be confirmed, but it is anticipated that the draft vision, outcome statements, objectives and budget figures will be confirmed by November 2020.

Public consultation will occur leading up to November 2020, with formal notification of the draft LTP 2021-2031 expected in February 2021. Council will ratify the LTP 2021-2031 in their June 2021 meeting.

The LTP 2021-2031 is important for rivers and drainage schemes because:

- It approves annual budgets for the coming ten years.
- It is a key planning document that provides mandate and direction for Council work programmes.

Council is aiming to have draft LTP 2021-2031 budget figures by August 2020.

Infrastructure Strategy

The Infrastructure Strategy is a requirement of the Local Government Act 2002 under section 101B. It is developed and adopted as part of the LTP and must cover a period of at least 30 consecutive financial years.

The purpose of the Infrastructure Strategy is to;

- Identify significant infrastructure issues.
- Identify the principal options for managing those issues and the implications of those issues.

Council's Engineering team leads the development of the Infrastructure Strategy.

Rivers and Drainage Asset Management Plan (AMP) 2021-2071

The AMP is a 50-year plan that expands on the Infrastructure Strategy, providing more information about the assets and the management thereof. The AMP is reviewed and updated every three years alongside the LTP process. Review and updating of the AMP is led by Council's Rivers and Drainage Assets team.

NEXT STEPS

- Presentation and discussion at the March 2020 advisory group meetings.
 - o Council staff receive feedback from advisory group members.
- March – August 2020: Workshop(s) and dialogue as appropriate between Council staff and advisory group members.
- September 2020: Advisory group meetings – opportunity for planning discussion follow-up.
- February 2021: LTP 2021-2031 (including Infrastructure Strategy and AMP) publicly notified.
- June 2021: LTP (including Infrastructure Strategy and AMP) adopted by Council.

Hemi Barsdell
Asset Management Specialist

Rangitāiki-Tarawera Rivers Scheme: Routine Maintenance Works Programme - Financial Year 2019-2020

Date: 20 February 2020

Source document BOPRC ID: A3329369

| | Reach | Work Type | Location | Annual Budget | Job Estimate | Status | Comments |
|----|-------------------------------|--|---------------|------------------|------------------|---------------------|-------------------------------|
| 1 | General | | | | | | |
| 2 | | Annual Flood Damage allowance | | \$200,000 | | | |
| 3 | R6 | Mangamate Stream Geo Bags | RB 6.0 | | \$20,000 | Completed | |
| 4 | R7 | Whirinaki River, Trench Willows | RB 1.7 | | \$35,000 | Completed | |
| 5 | R9 | Tarawera, Rock Toe | LB 29.9 | | \$40,000 | Completed | |
| 6 | R8 | Tarawera, Sax's, 50 mtrs | RB 2.8 | | \$45,000 | Completed | |
| 7 | R8 | Tarawera, Monitoring Site 50mts | RB 6.35 | | \$35,000 | In Progress | |
| 8 | R1 | Thornton Hall Road Causeway | RB 0.1 to 0.2 | | \$60,000 | | On hold [Lack of rock] |
| 9 | R8 | Tarawera, Murrays | RB 9.0 | | \$25,000 | Completed | |
| 10 | R9 | Tarawera, Upstream of SH30 bridge | LB 18.2 | | \$50,000 | | On hold [Lack of rock] |
| 11 | | Subtotal | | | \$310,000 | | |
| 13 | | Fly tipping and rubbish collection/disposal | | \$8,000 | \$8,000 | As required | |
| 14 | | Pest control | | \$8,000 | | | |
| 15 | R1,2,8,10 | All stopbanks - Rabbits | Various | | \$15,000 | In Progress | |
| 17 | Lower Rangitāiki River | | | | | | |
| 18 | Mouth to Matahina | Riverbank weed spraying (where required) | | \$8,900 | | | |
| 19 | R1 | Fonterra, Eastpack, BOPRC lease | L&RB | | \$3,500 | Partially completed | Sprayed at least once already |
| 20 | R1 | Various flood damage sites | L&RB | | \$4,500 | Partially completed | Sprayed at least once already |
| 21 | R1 | Stopbank gorse & blackberry | L&RB | | \$3,500 | Partially completed | Sprayed at least once already |
| 22 | R1 | Monks Mānuka Site | RB | | \$1,000 | Partially completed | Sprayed at least once already |
| 23 | R2 | Fraser gorse | LB 12.9- 17.6 | | \$2,000 | Partially completed | Sprayed at least once already |
| 24 | R2 | Various flood damage sites, willow, gorse & blackberry | L&RB | | \$4,000 | Partially completed | Sprayed at least once already |
| 25 | R2 | Stopbank gorse & blackberry | L&RB | | \$4,000 | Partially completed | Sprayed at least once already |
| 26 | R2 | Warbrick's gorse & blackberry | RB 15.1- 16.7 | | \$2,000 | Completed | |
| 27 | R2 | Ngāti Awa Farms gorse & blackberry | RB 17.7- 19.3 | | \$3,000 | Completed | |
| 28 | R3 | Various F/D Sites, willow, gorse | L&RB | | \$3,000 | As required | |
| 29 | | | | | | | |
| 30 | | Tree Clearing/mulching/layering | | \$60,000 | | | |
| 31 | R1 | Various sites (where required) | | | \$17,000 | Completed | |
| 32 | R2 | Martins | RB 19.3-20.2 | | \$15,000 | | |
| 33 | R3 | Peniteto | RB 28.5-29.0 | | \$15,000 | | |
| 34 | R2 | Various sites around flood damage sites | L&RB | | \$50,000 | | |
| 35 | | | | | | | |
| 36 | | Planting | | \$22,200 | | | |
| 37 | R1 to R10 | Various sites, release | | | \$20,000 | As required | |
| 38 | | | | | | | |
| 39 | | Rock replenishment | | \$300,500 | | | |
| 40 | R1 | Several sites being done under flood repair project | | | | | |
| 41 | R8 | Tarawera, several sites under flood repair project | | | | Partially completed | |
| 42 | R2 | Ngāti Awa Farms, [20mts bank repairs] | | | \$1,500 | | Summer 2019/20 |
| 43 | | | | | | | |
| 44 | | Fencing | | \$22,500 | | | |
| 45 | R1 to R10 | Various sites | | | \$22,000 | Partially completed | |
| 46 | | | | | | | |
| 47 | | Concrete floodwall sealant replacement | | | | | |
| 48 | | Various walls - Replace/repair sealant | | | \$20,000 | | Programmed |
| 49 | | | | | | | |

| | Reach | Work Type | Location | Annual Budget | Job Estimate | Status | Comments |
|-----|-----------|---|----------|------------------|--------------|---------------------|--|
| 50 | | Minor floodgates/Culvert Inspection | | \$1,300 | \$10,000 | In Progress | Ongoing |
| 51 | R1 | College Rd Edgumbe, Knife gate install | | | \$12,000 | Completed | |
| 52 | R1 | Olive Grove culvert & floodgate repairs | | | \$9,000 | Completed | |
| 53 | R1 | Rotting stump removal | | | \$10,000 | As required | |
| 54 | | | | | | | |
| 55 | R1 to R10 | Stopbank miscellaneous maintenance | | \$6,500 | \$20,000 | As required | |
| 57 | | Upper Rangitāiki River | | | | | |
| 58 | R4 | Channel/riverbank weed spraying | | \$14,800 | | | |
| 59 | R4,6 | Ohutu, Jones Wash, Hikurangi, Mangamate & Waikokopu | Various | | \$20,000 | In Progress | Ongoing |
| 60 | | | | | | | |
| 61 | | Riverbank weed spraying | | \$12,200 | | | |
| 62 | R6,7 | Horomanga & Whirinaki Rivers | Various | | \$12,000 | In Progress | |
| 63 | | | | | | | |
| 64 | | Tree clearing/mulching/layering/burning | | \$101,700 | | | |
| 65 | R4 | Various | L&RBs | | \$60,000 | Partially completed | Whites & Wilsons |
| 66 | R5 | Various | | | \$80,000 | Partially completed | |
| 67 | R6 | Various locations | | | \$23,000 | Partially completed | |
| 68 | R7 | Various locations | | | \$35,000 | Partially completed | |
| 69 | | | | | | | |
| 70 | | Channel maintenance, realignment & desilting | | \$344,000 | | | |
| 71 | R6 | Horomanga River various sites | | | \$20,000 | | Gravel extraction ongoing |
| 72 | R6 | Ohutu Stream, wire rope groyne trial | Various | | \$20,000 | As required | |
| 73 | R7 | Whirinaki River | Various | | \$90,000 | As required | |
| 74 | R5 | Rangitāiki River | Various | | \$90,000 | As required | |
| 75 | | Note: Horomanga access road being funded under gravel budget | | | | In Progress | Started last stage February 2020 |
| 76 | | | | | | | |
| 77 | | Planting poles | | \$53,400 | | | |
| 78 | R6 | Various where required | | | \$5,000 | Completed | |
| 79 | R6 | Various where required | | | \$7,000 | Completed | |
| 80 | R5 | Various where required | | | \$12,000 | Completed | |
| 81 | R7 | Various Where Required | | | \$5,000 | Completed | |
| 82 | R6 | Various where required | | | \$7,000 | Completed | |
| 83 | R6 | Various where required | | | \$4,000 | Completed | |
| 84 | | | | | | | |
| 85 | | Rock/rubble/ trenched willows | | \$37,800 | | | |
| 86 | R4,5,6,7 | Various Sites | Various | | \$50,000 | As required | |
| 88 | | Tarawera River | | | | | |
| 89 | | Riverbank weed spraying | | \$7,100 | \$10,000 | Completed | |
| 90 | | | | | | | |
| 91 | | Tree mulching/clearing/layering | | \$21,300 | | | |
| 92 | R8 | Herrings 800mts | LB 7.5 | | \$18,000 | In Progress | These will all be completed in conjunction with the planned flood repair works |
| 93 | R8 | Virbikas 800mts | RB 8.6 | | \$18,000 | Completed | |
| 94 | R8 | Virbikas 100mts | RB 10.7 | | \$5,000 | Completed | |
| 95 | R8 | Ngāti Awa 300mts | LB 8.7 | | \$6,000 | In Progress | |
| 96 | R8 | Virbikas 50mts | RB 8.55 | | \$3,000 | Completed | |
| 97 | R8 | Ngati Awa 500mts | LB 7.8 | | \$15,000 | In Progress | |
| 98 | R8 | Herrings 30mts | LB 7.0 | | \$1,000 | In Progress | |
| 99 | R8 | Virbikas 30mts Pampas | RB 6.7 | | \$1,000 | In Progress | |
| 100 | R8 | Virbikas 50 mtrs Pampas | RB 6.2 | | \$3,000 | In Progress | |
| 101 | R8 | Whites 30mts large Pine Trees [SH30] | RB 18.15 | | \$4,000 | Completed | |
| 102 | | Overall well over budget but catch-up maintenance needed | | | | | |
| 103 | | | | | | | |

| | Reach | Work Type | Location | Annual Budget | Job Estimate | Status | Comments |
|-----|-------------------------------|--|------------|---------------|--------------|---------------------|---------------------|
| 104 | | Planting | | \$11,000 | | | |
| 105 | | Various | | | \$10,000 | Completed | |
| 106 | | | | | | | |
| 107 | | Rock replenishment (where required) | | \$50,900 | | | |
| 108 | | | | | | | |
| 109 | R8 & 9 | Fencing | Various | \$1,200 | \$5,000 | In Progress | Will go over budget |
| 110 | | | | | | | |
| 111 | Stopbanks | Minor floodgate inspections | | \$700 | \$2,000 | Partially completed | Ongoing |
| 112 | | Stopbank miscellaneous maintenance | | \$2,400 | \$10,000 | As required | |
| 113 | | | | | | | |
| 114 | Reach 10 Canals, Awaiti, etc. | Stopbank Miscellaneous Maintenance | | | \$5,000 | As required | |
| 115 | R10 | Awaiti floodgate pad maintenance | | | \$5,000 | | |
| 116 | R10 | Section 109 Access Track | | | \$4,000 | As required | |
| 117 | | | | | | | |
| 118 | Old Rangitāiki Channel | Pump Inspections | | \$1,000 | \$1,000 | As required | |
| 119 | Pump Station | Pump six month Inspection | | \$700 | \$700 | In Progress | |
| 120 | | 2.5 year maintenance | | \$0 | | | |
| 121 | | 5 year maintenance | | \$2,600 | | | |
| 122 | | Ancillary maintenance | | \$5,000 | | | |
| 123 | | Electricity | | \$2,000 | \$4,000 | In Progress | |
| 124 | | Electric Motor Replacement | | | \$20,000 | Completed | |
| 125 | | Lower Pump replacement (under investigation) | | | | Completed | Gearbox repaired |
| 126 | | | | | | | |
| 127 | Floodgates | Floodgate inspections | | \$4,100 | | | |
| 128 | | Various Sites | | | \$10,000 | As required | |
| 129 | | | | | | | |
| 130 | R1 | Floodgate annual inspection | | \$400 | \$400 | As required | Ongoing |
| 131 | R1 | Floodgate Desilting | | \$300 | \$1,500 | As required | |
| 132 | R1 | Floodgate miscellaneous maintenance | | \$3,000 | \$3,000 | As required | Ongoing |
| 133 | R1 | Floodgate ancillary maintenance (Structure) | | \$3,200 | \$3,500 | As required | |
| 134 | | | | | | | |
| 135 | Kopeopeo West | Riverbank weed spraying | | \$1,800 | \$5,000 | As required | |
| 136 | | | | | | | |
| 137 | Stopbanks | Minor floodgates inspection | | \$1,300 | \$4,000 | | |
| 138 | R1 | Stopbank Miscellaneous Maintenance | | \$3,500 | \$10,000 | | |
| 139 | R10 | Poplar Lane stopbank top-up | RB 8.2-8.7 | | \$25,000 | | |
| 140 | | | | | | | |
| 141 | | Annual Maintenance Budget | | \$1,125,300 | | | |
| 142 | | Annual Flood Damage Repair Allowance | | \$200,000 | | | |
| 143 | | Overall Maintenance Budget | | \$1,325,300 | | | |
| 144 | | Total Scheduled Annual Maintenance Estimate | | | \$1,338,100 | | |

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



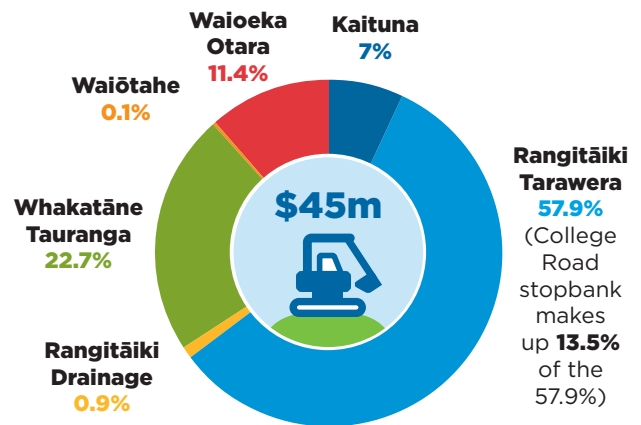
All repairs to
be completed by
30 June 2021

67% 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 89 complete ✓ | Whakatāne Tauranga 108 sites 59 complete ✓ | Waiōka Otara 59 sites 55 complete ✓ |
| Rangitāiki Drainage 53 sites 52 complete ✓ | Kaituna 45 sites 12 complete ✓ | Waiōtahe 31 sites All sites complete ✓ |

298 SITES 57% completed as at **31 December 2019**

College Road **stopbank realignment**
COMPLETE ✓

What's happening in 2019-2020



2019-2020 budget

11.4million

To complete:

Rangitāiki Drainage **pump station repairs**

100% of Rangitāiki
Drainage sites

90% of high
priority sites

Repairs
to a further
148
sites across
the region

MEMORANDUM



To: Rangitāiki-Tarawera Rivers Scheme
Advisory Group

For period 1 August 2019 to 31 January 2020

From: Paula Chapman
Project Manager - Flood Recovery

Date: 19 February 2020

File Ref: A3483432

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 two and a half years into the estimated four year programme. Physical repair works have been steady across the programme as conditions and material availability have allowed.
- As at 31 January 2020, 303 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, 91 sites from a total programme of 224 sites have either been completed (or identified as no longer required). Progress in this scheme has been hampered due to the constrained rock supply in the Eastern Bay of Plenty. The availability of suitable rock material remains a concern and may impact the programme period particularly in the Eastern Bay of Plenty.
- The most visible repair associated with the total project is the College Road stopbank rebuild which was completed in December 2018.

- The development of the community open space in College Road, Edgcumbe is now complete and was officially opened at a low key ribbon cutting ceremony on the 21 December 2019. The site named 'Papa Taonga' by the Edgcumbe community is the residual land following the purchase of sites required for the realignment and rebuild of the stopbank after the April 2017 breach (ex-tropical cyclone Debbie). The ribbon cutting was undertaken by the grandchildren of the various previous property owners. Council approved a grant of up to \$100,000 for the development of the site. The physical works were managed by Whakatāne District Council in collaboration with Bay of Plenty Regional Council and the Edgcumbe Collective.



- The process for claiming eligible costs from central government has been established. Current claims are for essential infrastructure repairs. Claim 10 was received in December 2019 and Claim 11 is currently being drafted. The total amount received from central government to date is close to \$7 million.
- 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.
- Two progress payments for Infrastructure Insurance have been received totaling \$3,000,000.
- A second progress payment of \$189,653 has also been received to support Council's Material Damage insurance claim.

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.
- 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 Edgcumbe Collective Newsletter and the Regional Council website to keep the community informed on work plans and progress. A project page is now included on Council's web site and interested people can follow the page to ensure they receive regular updates <https://www.boprc.govt.nz/floodrepairs>.
- Information is regularly provided to Whakatāne District Council's Rangitāiki Community Board through the Regional Council communications team.

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, Rangitāiki and Tarawera Rivers.
- Rakauroa Quarry (Matawai) has supplied all Ōpōtiki and Tauranga River sites, Alan Rust Quarry (Te Mahoe) the upper Rangitāiki work, and Ywarri the lower Rangitāiki Sites. Tarawera River rock requirements are being met through the Ratahi Quarry.
- Kaituna rock work is supported primarily by the Kaitemako Quarry (Welcome Bay).
- Staff are hopeful a new supply will become available from the recently consented Quarry in Tāneatua however this is not likely to eventuate until the beginning of April 2020 (i.e. outside of the main construction period).

1.6 Programme delivery

| |
|---|
| <ul style="list-style-type: none"> • A total of 520 sites have been identified in the repair programme across the region, 224 are associated with the Rangitāiki-Tarawera Rivers Scheme |
| <ul style="list-style-type: none"> • Across the programme 303 sites have been completed, 91 of these are in the Rangitāiki-Tarawera Rivers Scheme |
| <ul style="list-style-type: none"> • The programme of desilting and drainage bank repairs is approximately 98% complete across the Rangitāiki Drainage network |
| <ul style="list-style-type: none"> • 148 sites are targeted for completion in the 2019/20 year, 78 of those are in the Rangitāiki-Tarawera Rivers Scheme and to date 26 have been completed. |
| <ul style="list-style-type: none"> • Total programme completion date remains at 30 June 2021 but is currently being reviewed |

Key sites completed to date include:

- RT300 Toppo's lease, RT 318 Eastpac, RT314 DOC Lease and RT107 Reserve (Go Kart club) - all rock works. RT109 O'Donnell.
- Tarawera River Sites RT277, RT278 Zinc, RT282 Beeler, RT283 Virbickas - all rotten rock and brown graded rock works

Key sites underway include:

- Rangitāiki River sites in the area from Tanekaha Street to the Go Kart club in Edgumbe. Including: RT 315 Tanekaha Street, river distance 9.3 km LB - repair of exposed and eroded raw bank (approximately 180 lineal metres); and RT313 Morgan's, river distance 8.7 km RB - repair of existing rockwork and extension of the rock erosion protection asset (approximately 400 lineal metres)
- Tarawera River - RT272 and RT273 Virbickas, river distance 7.5–8.6 km

Key sites planned include:

- RT312 Chalmers, river distance 8.1 km RB - repair of existing rockwork and extension of the rock erosion protection asset (approx. 400 lineal metres)
- RT102 Davies, river distance 2.3 km; RT108 Chalmers, river distance 8.5 km; and RT308 Leaming, river distance 6.8 km
- Tarawera River sites - RT267, RT268, RT269, RT270, RT271 – McHardy's, State Highway 2 to river distance 7.2 km
- Tarawera River sites - RT274 and RT275, river distance 8.9-9.5 km
- Tarawera River sites - RT279 and RT280, river distance 14.5-15 km

1.7 Financial

Rangitāiki-Tarawera Rivers Scheme repair estimate

| | |
|---|--------------|
| Estimated original programme cost - Rangitāiki-Tarawera | \$27,945,800 |
| Estimated betterment value | \$15,143,000 |

2017/18 - actual costs

| | |
|---|--------------------|
| 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 YTD at 31 January 2020 - for infrastructure works | \$1,046,643 |

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 Undertake drain bank repairs in summer | BOPRC |
| Weather | Future weather events will exacerbate damaged sites | Complete site works in priority order as this factors in risk and consequence | BOPRC MCDEM Insurer |
| Weather | Severe weather event may cause new damage | Review works programme against new works (annual flood damage) | BOPRC MCDEM Insurer |
| Rock material availability | Suitably graded rock supply is restricted and the operating environment is variable | Working with rock sources to supply suitable material for works in Ōpōtiki (Rakauroa Quarry in Matawai) and Rangitāiki (Ywari Quarry in Manawahe), and Kaituna (Kaitemako) Encourage new rock sources to enter Council's prequalified panel supplier schedule Investigate opportunities to support new quarry's in the Eastern Bay of Plenty | BOPRC |
| Resource | Staff resource is limited for oversight of on-site works | Using in-house resources (Area Engineers) to supervise some sites. Additional contract resource for rock grading/audits and works completion 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 MCDEM and Insurers, maximise contributions from other stakeholders | BOPRC Aon MCDEM Insurer |

3 **Recoveries**

- Loss adjustors have been assigned for our infrastructure claim and our material damage claim. Staff are working with insurance specialists Aon to progress the claims process. Progress payments have been received for Infrastructure Insurance (\$3,000,000) and Material Damage (\$304,653) claims.
- The project team is working with the central government (MCDEM) representative and is comfortable with the process adopted. To date just under \$7,000,000 has been received.

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

- Complete 55% of Rangitāiki-Tarawera Rivers Scheme work
- Draft and receive MCDEM Claim 11
- Complete flood pump station repairs (Te Rahu)
- Conclude the material damage (pump stations) claim

Paula Chapman
Project Manager – Flood Recovery

MEMORANDUM



To: Rangitāiki-Tarawera River Scheme
Advisory Group

From: Mark Townsend
Engineering Manager

Date: 21 February 2020

File Ref: A3483496

Subject: Engineering update

1. Rangitāiki Floodway

Budget 2019/20: Design, consenting and construction \$5.7m

1.1 Rangitāiki Floodway Stage 5

Construction on Stage 5 of the Rangitāiki Floodway project is in the final stage of completion with just the road and bridge sealing, fencing and landscaping to be finished.

The major work included the new channel cut to the Rangitāiki River (bifurcation), the upgrade of Thornton Hall Road and associated bridge work. Tracks Concrete Ltd undertook the project and the only significant variation involved a slight alteration to the bridge design.



*Photo 1: View north showing the bifurcation cut
September 2019*



*Photo 2: View north showing the bifurcation cut
February 2020*



Photo 3: Bifurcation cut and new bridge

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

Stage 7 works contract works have been awarded to Waiotahi Contractors Ltd. Three tenders were received and the proposal from Waiotahi is in keeping with the budget provision.

Works commenced on site late January with establishment works and seepage trenches. The project is expected to be completed by August 2020.

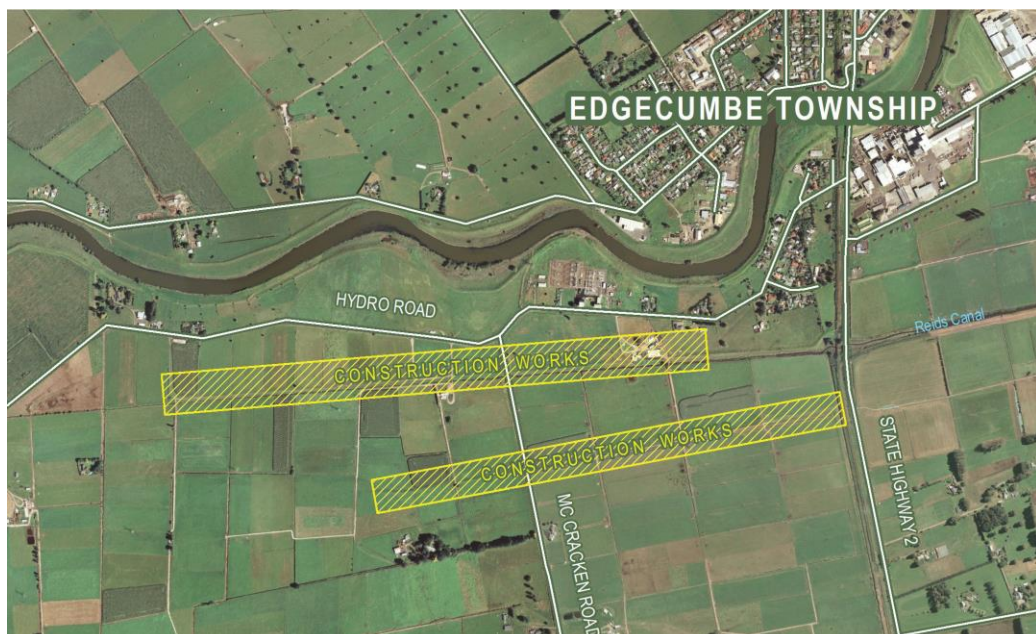


Photo 4: Stage 7 works locations



Photo 5: Stage 7 works February 2020

1.3 Rangitāiki Floodway spillway

The proposal to change the spillway has been fully consulted within the local community and is generally supported. Detailed design continues. A consent application for the updated spillway proposal has been lodged and is currently being processed.

1.4 Rangitāiki Floodway Stage 6

Stage 6 works are the subject of a specific presentation at this meeting.

As part of the Annual Plan deliberations in June 2019 the Council considered the programming and costs for the total Rangitāiki Floodway project. The project programme provides for Stage 7 to be completed before Stage 6. The reason for this is Stage 6 is a far more complex stage and more time was needed to undertake the geotechnical testing to inform the final design.

It was signalled to Council that a request for additional funding to complete Stage 6 and therefore the total project would be presented once Stage 6 work was fully designed and costed. This information will now be considered by Council at its Annual Plan workshop on 12 March 2020.

Stage 6 involves increasing stopbank heights along a section of the floodway downstream of SH2 at Edgcumbe. In total 6.5 km of stopbank is proposed to be raised along with subsequent required drainage and infrastructure changes.

2. Canal 109 culvert renewal

Budget 2019/20: Construction \$320,000

The Canal 109 culvert renewal and stopbank widening work is now complete. The contract was undertaken by Draintech Ltd and was completed in line with the project budget and ahead of schedule.

A feature of the project was the use of a temporary dam which restricted the canal flow to the work site. The flexible dam owned by Draintech Ltd is formed by inflating a sleeve with canal water. In this case the dam length was around 25 metres but the structure can be used for sites up to 40 metres wide can expand up to 10 feet in height. This method has replaced a traditional sheet pile solution resulting in project efficiencies.

The project required an additional \$90,000 of work not included in the original scope. The majority of this comprised extra backfill and rip rap along with additional piling due to onsite geotech conditions.



Photo 6: Canal 109 temporary dam

3. Geotechnical floodwall sites

Budget 2029/20: Design and construction \$834,000

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 identified sites are:

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

Site investigations have been undertaken and design options considered for the identified sites. In the case of the West Bank Road site (by Grieg Road) the geotechnical investigation and analysis is now complete and we are in the final design stage. It is expected that physical works will commence before the end of this financial year.

Staff are currently working through to final design for the remaining two sites and the work for these are expected to begin next financial year (2020/21).

4. Lower Rangitāiki River stopbank upgrades

Budget 2019/20: Design and construction \$1,199,000

The project involves stopbank top-ups on the left and right banks of the Rangitāiki River below Thornton Road Bridge. Right bank works are now complete and the left bank work will be scheduled once seepage analysis is complete.

5. Reynolds Bend overlay

Budget 2019/20: Design and construction \$417,000

This work involves investigations to establish the cause of ponding at Reynolds Bend, East Bank Road (lower Rangitāiki River) during the April 2017 flood event. The work consists of geotechnical investigations and subsequent overlay work. While 90 percent of the overlay work is now complete there is a requirement for further seepage investigations which may result in additional flood protection improvements.

6. Rangitāiki River and floodplain modelling

Budget 2019/20: Modelling \$156,000

Work is progressing well to target time frames. The work is 52 percent complete at this stage. This is a 12 month contract and results are expected in August/September 2020.

The aim of the project is to build and run a 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. The Consultant Group Awa is part of the Bay of Plenty Regional Council consultancy services panel contract and is one of the most notable specialist hydraulic and hydrologic modelling teams in Australasia.

Mark Townsend
Engineering Manager

Bay of Plenty Regional Council Toi Moana

Statement of revenue and expense - Rangitaiki-Tarawera Rivers Scheme

For the 6 months ending 31 December 2019

Run: 28-Jan-2020

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

| Line | 2019/20 | | Variance | | | Variance comments | 2020/21 |
|---------------------------------------|--|--------------|--------------|--------------------|-------------------------|-------------------|--------------|
| | Budget | Actual | \$ | Variance indicator | Draft Annual Plan \$000 | | |
| | \$000 | | | | | | |
| Operating revenue by class | | | | | | | |
| 1 | General rates | 221 | 221 | 0 | - | ▶ | 502 |
| 2 | Targeted rates | 2,212 | 2,212 | 0 | - | ▶ | 4,846 |
| 3 | External interest income | 6 | 0 | (6) | Lower | ▶ | 22 |
| 4 | Other revenue | 0 | 8 | 8 | Higher | ▶ | 87 |
| 5 | Fees and charges | 6 | 0 | (6) | Lower | ▶ | 12 |
| 6 | Investment income | 333 | 333 | 0 | - | ▶ | 710 |
| 7 | Total revenue | 2,779 | 2,775 | (4) | Lower | ▶ | 6,179 |
| Operating expenditure by class | | | | | | | |
| 8 | Administration expenses | 0 | 6 | (6) | Higher | ▶ | 3 |
| 9 | Other expenses | 19 | 105 | (86) | Higher | ▶ | 421 |
| 10 | Consultancy fees | 0 | 57 | (57) | Higher | ▶ | 0 |
| 11 | Contract work | 60 | 412 | (352) | Higher | ▶ | 739 |
| 12 | Finance costs | 911 | 715 | 196 | Lower | ▶ | 1,990 |
| 13 | Depreciation and asset disposal | 141 | 141 | (0) | Higher | ▶ | 286 |
| | Subtotal - expenditure | 1,130 | 1,436 | (306) | Higher | ▶ | 3,439 |
| 14 | Net overhead charges and recoveries | 365 | 285 | 80 | Lower | ▶ | 780 |
| 15 | Total operating expenditure | 1,495 | 1,720 | (225) | Higher | ▶ | 4,219 |
| 16 | Total operating surplus (deficit) | 1,283 | 1,054 | (229) | Unfavourable | ▶ | 1,960 |
| Capital revenue by class | | | | | | | |
| 17 | Capital funding | 1,064 | 1,984 | 920 | Higher | ▶ | 2,174 |
| | Total capital revenue | 1,064 | 1,984 | 920 | Higher | ▶ | 2,174 |
| 18 | Total surplus (deficit) | 2,347 | 3,038 | 691 | Favourable | ▶ | 4,134 |

Bay of Plenty Regional Council Toi Moana

Statement of revenue and expense - Rangitaiki-Tarawera Rivers Scheme

For the 6 months ending 31 December 2019

Run: 28-Jan-2020

| Variance Indicators | | | | | |
|---------------------|--|----------------------|--|--------------|--|
| Low <10% | | Medium 10% to 30% | | High >30% | |

| Line | 2019/20 | | Variance | | Variance comments | 2020/21 |
|---------------------------------------|--|--------------|--------------|--------------------|-------------------|--|
| | Budget | Actual | \$ | Variance indicator | | Draft Annual Plan \$000 |
| | \$000 | | | | | |
| Capital expenditure by project | | | | | | |
| 19 | Rangitaiki Floodway | 3,580 | 2,309 | 1,271 | Lower | The contract for works on stage 7 of the floodway has recently been awarded to Waiotahi Contractors 2,557 |
| 20 | Rangitaiki Floodgates | 0 | 45 | (45) | Higher | 0 |
| 21 | Rangitaiki Tarawera Capital Renewal | 886 | 278 | 608 | Lower | Work has yet to commence on the Rangitāiki floodwall 160 |
| 22 | Rangitaiki Tarawera Flood Damage Repairs | 1,604 | 984 | 620 | Lower | Works are behind programme but still expected to be close to budget at year end provided rock supply is available 7,881 |
| 23 | Total capital expenditure | 6,070 | 3,616 | 2,455 | Lower | 10,598 |

| Reserves | | Opening Balance \$000 | Net Movement \$000 | Closing Balance \$000 | |
|----------|---------------------------|-----------------------|--------------------|-----------------------|-----------------|
| 24 | Flood Damage Reserve | 0 | 0 | 0 | |
| 25 | Asset Replacement Reserve | (3,786) | 2,352 | (1,434) | Funds available |
| 26 | Works Reserve | (161) | (843) | (1,004) | Funds available |
| 27 | Reserves total | (3,947) | 1,508 | (2,438) | Funds available |

| | | | | |
|----|-----------------------|--------|-------|--------|
| 28 | Internal Loans | 33,456 | 1,783 | 35,240 |
|----|-----------------------|--------|-------|--------|

| Asset Valuation | | 1/07/2018 \$000 | Movement \$000 | 1/07/2019 \$000 |
|-----------------|------------------------|-----------------|----------------|-----------------|
| 29 | Asset Valuation | 98,527 | 7,033 | 105,560 |

MEMORANDUM



To: Rangitāiki-Tarawera River Scheme
Advisory Group

From: Mark Townsend
Engineering Manager

Date: 21 February 2020

File Ref: A3486667

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 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) | 20,000 | 0 |

The primary interest in extraction is Timberlands who uses the material for forestry roading work.

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.

Extraction is also steady 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) | 0 | 0 | 0 |

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

MEMORANDUM



To: River Scheme Advisory Groups

From: Kirsty Brown
Rivers and Drainage Assets Manager

Date: 5 February 2020

File Ref:

Subject: River Scheme Advisory Group membership

Under the advisory groups' Terms of Reference, members are appointed for a period of three years with a maximum term of six years. The first triennium is due to end in September 2020.

Staff are very pleased with how the advisory groups are working and are keen for members to continue in their positions for a further three year term.

We are recommending that:

- Members advise whether they wish to continue for the additional three year term (to September 2023).
- We advertise for nominations to fill any vacancies created by current members not wanting to continue for a further three years.

Kirsty Brown
Rivers and Drainage Assets Manager