



Whakatāne-Tauranga Rivers Scheme Advisory Group Meeting

Wednesday 15 September at 10am

Mātaatua Meeting Room (CMR1)
Bay of Plenty Regional Council
5 Quay Street
Whakatāne



Whakatāne-Tauranga Rivers Scheme Advisory Group Meeting

Wednesday 15 September 2021 at 10am

Agenda

- 1 **Welcome**
- 2 **Apologies**
- 3 **Notes of previous meeting held 17 March 2021**
- 4 **Matters arising from previous meeting**
- 5 **Scheme annual report 2020-2021**
- 6 **Capital work programme**
- 7 **Maintenance work programme**
- 8 **April 2017 Flood Repair Project**
- 9 **Members forum**
 - a. Changing strategic landscape discussion
- 10 **General business**
 - a. Asset management general business report
 - b. River scheme webpages demonstration
 - c. Gravel management
 - d. Environmental data portal demonstration
- 11 **Public forum**
- 12 **Meeting closure**

Notes of the Whakatāne-Tauranga Rivers Scheme Advisory Group meeting held at Bay of Plenty Regional Council, 5 Quay Street Whakatāne, on Wednesday 17 March 2021 commencing at 10am

Chair: Councillor Bill Clark

Advisory Group: Bernie Clark, Boots McNaught, Brian Power, Councillor Andrew Iles (WDC), Geoff Mercer, Glenn Cooper (WDC), Scottie McLeod

BOPRC Councillors: Councillor Toi Kai Rākau Iti

BOPRC Staff: Chris Ingle (General Manager Integrated Catchments), Kirsty Brown (Rivers and Drainage Asset Manager), Bruce Crabbe (Rivers and Drainage Operations Manager), Mark Townsend (Engineering Manager), Paula Chapman (Project Manager), Geoff Stone (Area Engineer), Hemi Barsdell (Asset Management Specialist), Mereana Toroa (Finance Support Team Leader), Charles Harley (Team Leader Eastern Catchments), Laura Albrey (Communications Partner), Tony Dunlop (Area Engineer), Cleo Hanlon (Rivers and Drainage Coordinator)

Public: Councillor Lesley Immink (WDC), Julie Gardyne (WDC), Phil Wardale (Whakatāne Boat Harbour Project)

Apologies: Fraser McGougan

1 **Welcome**

Councillor Clark welcomed everyone to the meeting, including Councillor Lesley Immink and Julie Gardyne from Whakatāne District Council. Chris Ingle introduced Laura Albrey, the new Communications Partner.

Chris Ingle opened the meeting with a karakia.

2 **Apologies**

Apologies received as recorded above.

3 **Notes of previous meeting held 16 September 2020**

Resolved

That the Whakatāne-Tauranga Rivers Scheme Advisory Group:

- 1 Confirm the notes of the meeting held 16 September 2020 as a true and correct record.**

**McNaught/McLeod
CARRIED**

4 Matters arising from previous meeting

Action Item 1 - Information relating to NERMN report recommendation for gravel management was sent to Richard Holmes.

Action Item 2 - Charles Harley connected Janie Stevenson (NZ Landcare Trust) with Fraser McGougan regarding establishment of a care group for the Whakatāne Catchment, and potential funding options for a coordinator. Funding may become available through Council's community fund to support the establishment of Catchment Groups (subject to Long Term Plan approval).

5 Engineering update

Mark Townsend spoke to the agenda report and delivered a presentation focusing on the Whakatāne River Project Future Proof:

Key points:

- Project Future Proof brings together a number of work streams (stopbank raising, seepage controls and floodwall assessments) with the objective of providing agreed levels of service within urban Whakatāne (stopbanks currently provide a 1% AEP level of service). The project covers the area from Kakaharoa Drive to the Whakatāne Boat Ramp. Seepage under the concrete floodwalls is a priority issue.
- Climate change projections indicate that peak river flows in 100 years' time will be significantly higher than present. These projections are being built in to the options being considered which include:
 - **Raising stopbanks.** This would mean a larger stopbank footprint and impacts on neighbouring properties. Stopbank raising is also high cost, and as stopbanks get higher the consequences of stopbank failure are greater.
 - **Higher and longer floodwalls with associated geotechnical seepage controls.** Floodwalls would need to be moved landward and could potentially be 600-800 mm higher than the current floodwalls. This option is in conflict with Whakatāne District Council's Town Revitalisation Project which through public consultation has a focus on connecting the town with the river.
 - A wider catchment solution being considered as part of the River Scheme Sustainability Project is to **slow flood flows in appropriate upstream areas.** This would involve constructing a system of low bunds where water would build up behind the first bund before overtopping that bund and then building up behind the next bund and so on, with the result of flood water taking longer to flow through the river system.

Discussion:

- Mark Townsend advised members that the timeframe for the project is three years and it is currently still in the early investigative stage. He assured members that Regional Council is working collaboratively with Whakatāne District Council and Ngāti Awa, and that there will be ongoing information provision and engagement with the community through the various stages of the work.

- Councillor Iti advised that he was involved with a project walk around with members of Ngāti Awa Rūnanga. They are aware of the project's focus and project information is being shared and discussed with them, including their aspirations for the old Army Hall site.
- Crown Infrastructure Partners (CIP) shovel ready project funding was awarded to Whakatāne District Council for various projects (e.g. Whakatāne Boat Harbour and Town Wharf remediation) and is to be spent in stages. Regional Council has also received CIP funds (\$4 million) to be spent in stages, the majority for remediation of seepage issues.
- Whakatāne District Council has undertaken significant consultation as part of its town revitalisation project and both councils are now considering how best to incorporate community aspirations with Regional Council's flood protection improvements works. The councils will work together on the second phase of consultation, with Regional Council responding to flood protection questions and feedback.

6 Gravel management

Paula Chapman spoke to the agenda report:

Key points:

- A consent permitting gravel extraction is being sought for an area upstream of Ohotu Bridge. The original hearing date has been postponed, with a new hearing date still to be set.
- Applications for gravel extraction are assessed by Engineering staff to determine whether there is adequate material to be taken and if extraction will benefit management of the river. If an application is unsuccessful, an alternate location can be suggested if extraction is necessary for river management. Applications are managed on a first-in-first-served basis.

7 Operations update

Bruce Crabbe spoke to the agenda report and Geoff Stone delivered a presentation.

Key points:

- Fly tipping continues to be an issue, particularly at the Kope-Orini pump station.
- Some grazing licenses within urban Whakatāne have been retired. As a result there is more vegetation maintenance (pest plant control, mowing) required in these areas.
- Concrete and steel work remediation is being undertaken on the Kope-Orini floodgates. Contech were engaged to undertake the work after staff saw what was being achieved at the Whakatāne Wharf.
- Central government funding enabled high risk trees to be removed from the stopbank along Arawa Road, near Trident High School. The stumps are still to be removed and the stopbank appropriately remediated.

8 April 2017 Flood Repair Project update

Paula Chapman spoke to the agenda report provided and delivered a presentation showing progress with the April 2017 Flood Repair Project:

Key points:

- Repair project is now over 90% complete, and forecasted to be 98% complete by 30 June 2021.
- The Whakatāne-Tauranga scheme has 17 repair sites remaining.
- The projected budget for the Whakatāne-Tauranga scheme at the start of the project was \$11.5 million. Current forecast to completion is \$9.5 million. Some low priority sites have self-healed or the erosion has stabilised. Some other sites were re-evaluated prior to work commencing and the repair method changed to a lower cost method. \$6.5 million has been spent on repairs to date, and \$3 million has been recovered from central government and insurance.
- The majority of the remaining work is upstream of Rūātoki Bridge. Fourteen sites had been identified in this area, however there has been access issues and conversations with hapū are continuing. A drone survey will be undertaken within the next few months to determine if any sites can be removed from the programme.
- The Te Rahu pump station work did not go to open tender because was awarded to a construction company that had undertaken similar work on Canal 109. A contract price was negotiated, with Council taking on some of the risk.

9 Finance report

Kirsty Brown provided an overview of the scheme's revenue and expenditure for the six months ending 31 December 2020:

Key points:

- Total operating revenue - \$2000 higher than budget
- Total operating expenditure - \$294,000 higher than budget, due to maintenance works being ahead of schedule.
- Resulting in an operating deficit of \$291,00
- Total capital revenue was \$271,000 lower than budget, due to delays in formalising central government funding.
- Total capital expenditure was \$916,000 lower than budget, but is expected to be close to budget at year end.
- Total reserve funds - \$606,000 available
- Loan balance at 31 December 2020 - \$7.2 million
- Scheme asset value at 1 July 2020 - \$82.5 million.

10 River scheme planning (AMP and LTP)

Hemi Barsdell delivered a presentation on the Asset Management Plan and the Long Term Plan:

Key points:

- Additions have been made to the proposed Long Term Plan capital budget. The 10 year total has changed by \$1.34 million.
- At the Advisory Group workshop in September 2020 a 10-20% increase in rates was suggested. This has improved due to a reduction in loan interest rates.
- Submissions to the Long Term Plan close on 22 March.
- A rates calculator that estimates the rates for individual properties, based on the proposed Long Term Plan, is available on the Council website.
- There is landowner concern about seepage through the stopbank along Eastern Drain. Investigations are underway to identify a solution. The site is complicated by a road, with associated drainage and culverts, located next to the bank.

11 Co-governance/community group updates

Charles Harley provided a verbal update on community care groups working within the catchments:

Key points:

- Fraser McGougan has been working with Janie Stevenson (NZ Landcare Trust) on catchment care groups. Fraser has recently been appointed as a Dairy NZ Environmental Ambassador.
- The Waiotahi group has been active for a couple of years, with 90% of the catchment's landowners involved. There is also a focus group from the Nukuhou catchment. Ideally there would be one care group for each catchment, providing a forum for farmers and landowners to discuss issues with Council and vice versa.
- Regional Council are responsible for implementing new regulations resulting from the National Policy Statement for Freshwater Management. One of these regulations is a stock exclusion from waterways rule. Council will be working with landowners with stock crossings through rivers and streams to achieve solutions in line with regional and national policy. There are big implications, particularly for properties split by a river. Council are also working collaboratively with Dairy NZ and Fonterra on this issue.
- Council has begun a review process of the Regional Natural Resources Plan to ensure consistency with the updated national policy and environmental standards. Changes will be notified in 2024.

12 **Whakatāne boat harbour update**

Phil Wardale (Project Management – Whakatāne Boat Harbour Project) delivered a presentation on the project:

Key points:

- Funding for the project had been received from the Provincial Growth Fund.
- Whakatāne needed more berthage, with wait lists for berths in town, at the marina and the yacht club. Maintenance and servicing was moving out of Whakatāne and there were constraints on marine tourism, along with trailer boat ramp demands.
- Land downstream of the Landing Road bridge, between Keepa Road and the river stopbank, has been selected as the site for the harbour.
- Dredging will be required in some areas of the river. There will be a provision for maintenance dredging. Flood events will be the biggest risk for this project, however this risk already exists at the existing wharf.
- There is some loss of high value wetland, however there is an opportunity for remediation of wood waste sites within wetland areas. No dioxin has been located from the testing that has been undertaken.
- New harbour infrastructure will be designed and built to provide the appropriate level of flood defence.
- There are currently 78 berths in the selected option, however this will be refined in the detailed design. There will also be covered maintenance sheds.
- The site has been split in two – Stage 2 is the second half of the site, to include recreational berths and car and trailer stores.
- There will be public access to the harbour, with logical navigation through the property.
- DHI are undertaking the modelling, with input from Tonkin & Taylor. All options have been considered, including sedimentation rates and flood levels. The access channel to the proposed harbour presents the biggest risk to maintaining flood protection.
- Concern was expressed by some advisory group members of the potential future likelihood that scheme ratepayers would incur additional costs as part of this development.

13 **General business**

Kirsty Brown took the agenda report as read.

Boots McNaught had been asked by a member of the public why there was tree removal at the end of Eivers Road, who responded it was planned works. It was also noted that foaming has been observed at the pump station at the rose gardens. This effect is often caused by aeration created in the discharge process.

14 **Public forum**

- Members sought an update on remediation of the Kopeopeo West extension (extending remediation of the Kopeopeo Canal to the west of SH2). Bruce Crabbe responded that investigations are ongoing, and an options report would be going to Council in June. Members noted that a consequence of a flood from this canal could result in dioxin being washed across neighbouring properties.
- A new sand bar is forming in the Whakatāne River near the Board Mills. Mark Townsend responded that Council are in the process of undertaking a capacity review of the river using electronic models and data from ground based surveys. This review will highlight if there are any capacity issues that would warrant management of the sand bar.

Hemi Barsdell ended the meeting with a karakia.

Meeting closed at 12:34pm

Whakatāne-Tauranga Rivers Scheme Annual Report 2020-2021

The purpose of this report is to provide an overview of the Whakatāne-Tauranga Rivers Scheme operational and capital works programmes and finances for 2020-2021

Maintenance work programme

Maintenance works comprise activities that ensure the drainage and river flood protection networks are operational and providing the agreed level of service. These activities are programmed through the Rivers and Drainage Asset Management Plan taking into account asset lifecycle, and maintenance and inspection schedules.

The 2020-2021 Whakatāne-Tauranga maintenance programme was delivered generally on budget and to programme

Programme highlights

Establishing native plantings around the inanga ponds near Ferry Road that was established in 2019-2020. The ponds have generated a lot of interest from local river users.



Native plantings for habitat and landscape enhancement around the confluence of the Kopeopeo and Orini canals, and at several sites in the area between Awatapu and Trident High School.



Completion of the major concrete refurbishment works and flood gate replacement at the Kope-Orini floodgate structure. This work has significantly extended the structure's life expectancy.

Capital work programme

The larger multi-year capital works projects are largely on track with some programme slippage provided for through carry forward funding recommendations. The reasons for programme slippage vary across the projects. Many of the projects are multiyear and multifaceted. Adjustments have been needed to allow for overseas supply issues, additional consultation and fitting in with other agencies timelines.

Project name	Revised Budget vs Actual 2020-2021
<p>Whakatāne River Capacity Review</p> <p>The purpose of this project is to complete a review for the existing Whakatāne River stopbanks from the Whakatāne River/Tauranga River confluence to the Whakatāne River mouth and determine the required stopbank crest levels to meet the scheme level of service.</p> <p>Project status – modelling work to continue in 2021-2022</p>	<p>Revised Budget - \$25,000</p> <p>Actual - \$40,895</p>
<p>Project Future Proof: Whakatāne Town Centre Flood Defence Upgrade</p> <p>This project brings together a number of work streams focused on ensuring that flood protection assets within the Whakatāne town centre (from Kakaharoa River to the boat ramp) provide the agreed levels of service, and will continue to protect the community from flooding in the coming decades.</p> <p>Considerable investigations have taken place and the detailed design phase is almost ready to commence. The detailed design work was delayed to align with Whakatāne District Council's town revitalisation project and to enable further community engagement.</p> <p><i>The Quay Street/Kakaharoa Drive seepage remediation work has attracted Central Government Climate Resilience Funding.</i></p> <p>Project status – investigation and engagement work will continue in 2021-2022</p>	<p>Revised Budget - \$1,000,000</p> <p>Actual - \$557,193</p> <p>(under Whakatāne River Stopbanks (stage 2) and Whakatāne Floodwalls in the attached draft statement of revenue and expenditure)</p>
<p>Te Rahu Pump Station – discharge pipe replacement</p> <p>This project involved the replacement of the discharge pipeline to the canal outlet which was in poor condition and affecting the integrity of the canal stopbank.</p> <p>Project status – complete</p>	<p>Revised Budget - \$250,000</p> <p>Actual - \$448,361</p>
<p>Whakatāne-Tauranga Renewals</p> <p>Renewal work at the Kope-Orini flood gate was delivered within the maintenance budget. The maintenance work involved removal and replacement of the concrete and steel that had severely deteriorated.</p> <p>Project status – complete</p>	<p>Revised Budget - \$137,000</p> <p>Actual – nil</p> <p>(work carried out under maintenance budget)</p>

Financial overview 2020-2021

Attached is the Draft Statement of Revenue and Expense for the Whakatāne-Tauranga Rivers Scheme for the 12 months ended 30 June 2021 (draft until adopted by Council).

Key points:

- **Operating revenue** was generally on budget, with lower than forecast interest rates (the call rate sat at 1.5% for the year) being counteracted by higher revenue generated from grazing licenses.
- **Operating expenditure** was \$157,000 higher than budget, mainly due to additional flood damage and assets defects work and the effects of increased asset valuation.
- This resulted in an **operating deficit** of \$170,000
- **Capital revenue** was \$842,000 lower than the budget of \$1,400,000
- **Capital expenditure** was \$2,057,000 lower than budget of \$3,812,000, with the Flood Repair Project significantly under budget, and carry forwards into 2021-2022 proposed for a number of projects.
- Total **reserve fund** opening balance of \$466,000 and closing balance of \$1,099,000 (increased by \$632,000)
- **Loan** opening balance of \$7,370,000 and closing balance of \$8,141,000 (increased by \$771,000)
- **Asset valuation** as at 1 July 2020 of \$82,517,000, with the 2021 annual valuation currently underway

Bay of Plenty Regional Council Toi Moana








Statement of Revenue and Expense: Whakatane-Tauranga Rivers Scheme (Draft unitl adopted by Council)

For the 12 months ending 30 June 2021











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

2020/2021		Variance		Variance comments	2021/22
Budget	Actual	\$	Variance indicator		Budget
\$000					\$000

Line Operating revenue by class

1	General rates	176	176	0	-		189
2	Targeted rates	1,820	1,820	0	-		1,912
3	External interest income	11	0	(11)	Lower		22
4	Other revenue	60	78	18	Higher		61
5	Revaluation and asset disposal gains	0	(7)	(7)	Lower		0
6	Investment income	251	251	0	-		322
7	Total revenue	2,318	2,317	(1)	Lower		2,507

Operating expenditure by class



8	Administration expenses	9	11	(2)	Higher		8
9	Other expenses	279	385	(106)	Higher		406
10	Consultancy fees	0	18	(18)	Higher		0
11	Contract work	488	589	(102)	Higher		542
12	Finance costs	219	225	(6)	Higher		0
13	Depreciation and asset disposal	349	272	78	Lower		272
16	Subtotal - expenditure	1,344	1,501	(157)	Higher		1,227
17	Net overhead charges and recoveries	513	526	(13)	Higher		1,006
18	Total operating expenditure	1,857	2,027	(170)	Higher		2,234
19	Total operating surplus (deficit)	461	290	(170)	Unfavourable		273

Bay of Plenty Regional Council Toi Moana








Statement of Revenue and Expense: Whakatane-Tauranga Rivers Scheme (Draft unitl adopted by Council)

For the 12 months ending 30 June 2021

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

	2020/2021		Variance			Variance comments	2021/22
	Budget	Actual	\$	Variance indicator	Budget		
	\$000					\$000	
Capital revenue by class							
20	Capital funding	1,400	558	(842)	Lower		1,378
21	Total capital revenue	1,400	558	(842)	Lower		1,378
22	Total surplus (deficit)	1,861	849	(1,012)	Unfavourable		1,651

Capital expenditure by project

24	Whakatane Tauranga Flood Damage Repairs	2,400	709	1,691	Lower		Majority of works complete	717
25	Whakatane Tauranga culvert renewals	137	0	(137)	Lower		Proposed carry forward	51
26	Whakatane River (modelling)	25	41	(16)	Higher			0
27	Whakatane River stopbanks (Stage 2)	510	553	(43)	Higher			1,024
28	Te Rahu Pumpstation	250	448	(198)	Higher		Works are complete	0
29	Whakatane Floodwalls	490	4	(486)	Lower		Proposed carry forward	0
30	Total capital expenditure	3,812	1,755	2,057	Lower			1,792

Reserves

	Opening Balance \$000	Movement \$000	Closing Balance \$000		
31	Flood Damage Reserve	193	199	392	Funds available
32	Asset Replacement Reserve	(562)	(193)	(754)	
33	Works Reserve	835	626	1,461	Funds available
34	Total Reserves	466	632	1,099	Funds available

Loans

1/07/2019 \$000	Movement \$000	1/07/2020 \$000
-----------------	----------------	-----------------

Asset Valuation

7,370 771 8,141

78,685 3,832 82,517

July 2021 revaluations are currently underway

Whakatāne-Tauranga Rivers Scheme

Capital Works Programme 2021-2022

The following table outlines the Whakatāne-Tauranga Rivers Scheme capital work programme for 2021-2022

Budget figures are from the Long Term Plan 2021-2031. There are proposed changes to these figures, incorporating unspent 2020-2021 budgets being carried forward as well as some works being deferred until 2022-2023. The proposed revised budget figures will be confirmed following Council's September meeting.

Whakatāne-Tauranga Rivers Scheme Capital Budget for 2021-2022 is \$1,792,000 (in addition, proposed carry forwards/budget transfers of \$775,600 give a proposed revised budget of \$2,567,600)

Project name and background	LTP Year 1 Budget 2021-2022	Proposed revised budget 2021-2022	Milestones 2021-2022
<p>April 2017 Flood Repair Project</p> <p>All flood repair works were planned to be completed by 30 June 2021, however 15 repair sites remain on the Whakatāne River and these will be reassessed and completed by 30 June 2022.</p> <p>For information and updates visit the Project Page or www.boprc.govt.nz/our-projects/april-2017-flood-repair-project</p>	\$716,800		<ul style="list-style-type: none"> Remaining Whakatāne River flood repair sites completed by 30 June 2022
<p>Whakatāne-Tauranga Culvert Renewals</p> <ul style="list-style-type: none"> Kope-Orini floodgate – health and safety upgrade of the floodgate lifting gantry and access platform Fortune's Road pump station – floodgate replacement Any culvert repairs required as a result of tree removals from stopbanks associated with the Safeguarding our Stopbanks Project. 	\$51,200	\$188,200 (includes \$137,000 carried forward from 2020-2021)	
<p>Eastern Drain Stopbank Upgrade</p> <p>The Eastern Drain stopbanks have been identified as being of high risk of failure. This is predominately due to the lack of space available. Investigations will determine the optimum location and design of the stopbanks.</p> <p><i>There is also budget for this project in 2022-2023</i></p>		\$153,600	<ul style="list-style-type: none"> Geotechnical investigations Upgrade options Concept design

Project name and background	LTP Year 1 Budget 2021-2022	Proposed revised budget 2021-2022	Milestones 2021-2022
<p>Project Future Proof: Whakatāne Town Centre Flood Defence Upgrade</p> <p>Project Future Proof is a programme of work to ensure that river scheme assets within the Whakatāne town centre (from Kakaharoa Drive to the boat ramp) will continue to protect the community from flooding in the coming decades. The work involves upgrades to stopbanks, floodwalls and stop-logs (temporary flood barriers), including geotechnical seepage control measures. This project is being undertaken alongside the Whakatāne District Council’s Town Revitalisation Project.</p> <p>The budget for the wider project is broken into two areas in the budget information:</p> <ul style="list-style-type: none"> • Whakatāne River Stopbanks (Stage 2) • Whakatāne Floodwalls <p><i>There is also budget for this project in 2022-2023 and 2023-2024</i></p> <p><i>The Quay Street/Kakahoroa Drive seepage remediation component of this work has attracted Central Government Climate Resilience Funding.</i></p> <p>For information and updates visit the Project Page or www.boprc.govt.nz/our-projects/whakatane-town-centre-flood-defence-upgrade</p>	<p>\$1,024,000</p>	<p>\$1,509,000 (including \$485,000 Whakatāne Floodwall budget carried forward from 2020-2021)</p>	<ul style="list-style-type: none"> • Ongoing consultation with iwi, stakeholders and the community on preferred options • Resource consent application • Detailed design



Legend: Stopbank Floodwall

Whakatāne-Tauranga Rivers Scheme

Maintenance Programme 2021-2022

The purpose of this report is to provide an overview of the Whakatāne-Tauranga Rivers Scheme maintenance work programme for 2021-2022

Maintenance programme

Maintenance works comprise activities that ensure the drainage and river flood protection networks are operational and providing the agreed level of service. These activities are programmed through the Rivers and Drainage Asset Management Plan, taking into account asset lifecycles, maintenance and inspection schedules. Maintenance programme budgets are set during the Long Term Plan and Annual Plan processes.

Scheme maintenance work includes:

- pump stations - operation, inspections and maintenance (Kope-Orini, Fortunes and Te Rahu pump stations)
- culverts and floodgates - inspections and maintenance
- stopbanks - inspections, maintenance, repairs, pest control
- river maintenance - pest plant control, vegetation maintenance, gravel beach shaping and overflow depressions, and habitat enhancement
- erosion control - rock refurbishment, edge planting, trenched willows, willow maintenance
- annual flood damage repairs
- repairs to defects identified through asset condition inspections and assessment

Key projects in 2021-2022:

- Repairing high priority defects identified through asset condition assessments (noting that the maintenance work proposed expenditure in 2021-2022 is higher than budget as a consequence of this work)
- Kope-Orini floodgates – erosion repairs upstream and downstream of the structure, and an upgrade of the floodgate opening gantry
- Inanga spawning area enhancement at Awatapu Lagoon outlet channel confluence with Whakatāne River
- Repairs to nine annual flood damage sites – three on the Whakatāne River and six on the Tauranga River.
- A focus on pest plant control e.g. combating the proliferation of pampas in the river floodway
- Safeguarding our Stopbanks project works, within the Whakatāne urban area, to remediate structures, trees and vegetation that could impair the integrity of community flood protection stopbanks

Rock procurement to support community resilience

Last year Council approved a procurement plan for quarried rock material that resulted from a strategic review of Council's existing rock procurement practices. The purpose of the plan was to consider fixed term contracts for rock supply chain components to build community resilience and more certainty of supply at an agreed price. The initial stage proposed the establishment and supply of flood event safety stockpiles.

An Invitation to Negotiate (ITN) process was adopted and this invited suppliers to submit best prices to supply and maintain designated Regional Council stockpiles, and also stockpiles at supplier recommended sites. The process concluded with resolutions from Council to enter into stockpile arrangements for the

most cost effective options.

In the case of the Whakatāne-Tauranga Rivers Scheme an appropriate stockpile location is yet to be identified. Council will now look at the feasibility of establishing a permanent stockpile at a Council site on Paroa Road. The purpose of the stockpile will be to support community resilience by having material on hand in flood events and allowing time for staff to plan subsequent work should it be needed. The material will also be available to support renewal and capital works as required.

As part of the rock procurement plan implementation all ITN participating suppliers will be invited to enter into the Rivers and Drainage Panel Supplier Contracts for rock supply and transportation.

Maintenance programme budget 2021-2022

A budget summary table for the Whakatāne-Tauranga Rivers Scheme maintenance programme is shown below, followed by a more detailed breakdown of the programme with estimated costs of proposed works. The annual budget figures include operational costs only and exclude non-operational costs (e.g. debt servicing and infrastructural asset insurance).

Whakatāne-Tauranga Rivers Scheme Maintenance Works Programme Budget 2021-2022	
Annual Maintenance	\$690,744
Annual Flood Damage	\$193,500
TOTAL	\$884,244

Whakatāne-Tauranga Rivers Scheme: 2021-2022 Maintenance Works Programme

1/09/2021

Objective ID: A3831168

	Work Type	Site	Location (km)	Annual Budget	Job Estimate
General					
	Annual Flood Damage Allowance (Excluding planned Flood Repair Project works)			\$193,500	
Tauranga River					
	Bank erosion slumping repair	Wardlaw's bottom site	LB 22.2km		\$10,000
	Barsdell erosion layering trench willow planting	H Barsdell	RB 28.9km		\$13,000
	Raroa Stream - Erosion repair, pole planting & gravel management	Maandonks	RB 0.2km		\$6,000
	Pole planting and gravel management	Wardlaw's/Browns	LB 22.2-24km		\$15,000
	Pole planting & mulching	Faulkner's	RB 25km		\$15,000
	Erosion repairs: rock groynes, lining and planting	Taylor's, Tauranga Rvr	RB 6.5km		\$48,000
		Subtotal			\$107,000
Whakatāne River					
	Upstream Te Rahu Outlet - tidy up rock & planting	Schleper Lease	LB 6.4km		\$10,000
	Orini Stream and Whakatāne River edge - rock replenishment	Orini Floodgate structure	LB 2.2km		\$30,000
	Erosion repair - layer & trench willows. On hold	Black's	LB 31.8km	On hold	\$0
		Subtotal			\$40,000
	Fly tipping and rubbish collection/disposal	All sites		\$8,000	\$4,000
		Subtotal			\$4,000
	Pest Control	All sites		\$4,000	\$4,000
		Subtotal			\$4,000
		SUBTOTAL - GENERAL			\$155,000

	Work Type	Site	Location (km)	Annual Budget	Job Estimate
Whakatāne River					
Mouth to Lime works including Tributaries	Drain/Canal/Tributary Maintenance			\$95,760	
	Deweeding	Downards Rd Drain & Catchwater drain			\$4,000
	Pole planting and native planting	Waioho Stream various			\$8,000
	Outlet channel desilting	Various Sites	RB and LB		\$12,000
	Drain desilting	Simpsons, Rewatu Road, Waiwherowhero, etc	RB and LB		\$5,000
	Desilting & berm management	Waioho Canal	1.1km-4.3km		\$16,000
		Subtotal			\$45,000
River Channel Weed Spraying					
	Rūātoki Area - pampas etc		33.2- 37.2km	\$11,816 on hold	\$0
	Waioho Stream - spray pampas	White Pine to Downards Rd			\$2,000
	Waiwherowhero Stream	Reid Road to Cross Road			\$4,000
	Spray pampas on beaches	Various			\$15,000
		Subtotal			\$21,000
Tree Clearing, Mulching & Layering					
	Remove trees and repair stopbank	Board Mill she oaks	LB 4.5km - 4.7km		\$30,000
	Remove tree stumps and repair stopbank	Whakatane Bridge - downstream side	LB 4.4km		\$10,000
	Remove trees and repair stopbank	Waioho Canal above Titoki Rd	RB & LB		\$20,000
	Remove trees and repair stopbank	Henderson St - Norfolk pine	RB 4.8km		\$40,000
	Remove trees - Riverside Drive	various sites	RB 5.5km - 6.9km		\$30,000
	Mulch trees and blackberry, and remove stumps on stopbank (low level stopbank)	Rewatu Road	LB 15.1 - 17.6km		\$10,000
	Mulch stopbank trees and blackberry - 100yr s/b	Rewatu Road	LB 15.1 -17.6km		\$15,000
	Remove trees and repair stopbank	Keepa Road	LB 2.1km - 2.9km		\$10,000
	Remove trees and repair stopbank	Ferry Road	RB 5.6km		\$6,000
		Subtotal			\$171,000

	Work Type	Site	Location (km)	Annual Budget	Job Estimate
	Planting			\$32,036	
	Infill planting	Various sites all reaches			\$10,000
	Release spraying of native plants	Waikirikiri, McGougan & Sisam's			\$0
	Release spraying of native plants	Simpsons x 2 , Martin's lease, Ferry Road whitebait ponds, Cleary Ave & Orini Canal			\$8,000
	Raupouroa Pa site	Deegan's lease area	LB 11.3km		\$6,000
	Planting restoration sites Awatapu & Ferry Road	Various			\$15,000
		Subtotal			\$39,000
	Rock/Rubble			\$125,100	
	Rock replenishment	Te Rahu Canal	LB 0.2km		\$10,000
	Rock replenishment	Orini Canal stopbank @ floodgates	LB 0.6km		\$40,000
	Rock replenishment	Keepa Road Whakatāne river	LB 2.6km - 2.1km		\$10,000
		Subtotal			\$60,000
	Fencing				
	Waioho Lease	Andre Smith lease			\$6,000
	Raupouroa Pa site	Deegan's lease area	LB 11.3km		\$2,000
	Te Rahu floodgate outlet	Schleper Lease			\$2,000
	Te Rahu Canal edge	Schleper Lease (TBC)	LB		\$5,000
		Subtotal			\$15,000
	Beach Shaping/Ripping & Channel Alignment			\$50,000	
	Beach ripping	Various	RB and LB		\$10,000
	Over flow channel cuts	R Taylor	RB and LB 6.4km to 6.6km		incl
	Remove obsolete rail Iron from river bed and paddocks	Waikirikiri to Pekatahi and Valley road			\$3,000
		Subtotal			\$13,000
		SUBTOTAL - MOUTH TO LIME WORKS			\$364,000

	Work Type	Site	Location (km)	Annual Budget	Job Estimate
Stopbanks	Stopbank Miscellaneous Maintenance			\$23,062	
	Stopbank mowing (Rowing Club to Awatapu)	Urban area (various)	RB 4.3-9.6km		\$20,000
	Waioho Canal spraying pampas	Various	RB & LB		\$5,000
	Stopbank mowing, Board Mill		LB 4.3-5.3km		\$1,000
	Houston's culvert replacement		RB 13.9km		\$0
	All floodgate outlets - misc. repairs	Sykes, Houston's, Ingle's, Rewatu Rd and others	Various		\$6,000
	Stopbank repairs Waioho Canal	Ernest's	3km		\$5,000
	Repairs, access & gravel extraction/desilt	Red Devon outlet			\$3,000
	Berm/floodwall and stoplog management, Waioho	Poroporo to Titoki Rd	Various		\$2,000
	Stopbank defect repairs	191 Rewatu Road	LB 9.6k to 9.7km		\$50,000
		Subtotal			\$92,000
Floodgates	Floodgate Inspections	Various sites		\$4,326	\$4,100
	Floodgate replacements	Various outlets	RB		\$15,000
	Floodgate desilting	Various sites		\$53	
	Floodgate miscellaneous maintenance	Various sites		\$3,150	\$3,150
	Floodgate ancillary maintenance	Various sites		\$1,700	\$1,700
	Floodgate headwall and culvert replacement	Trident High & Awatapu	RB 4.9km-9.3km		\$20,000
	Red Devon floodgate replacement headwall install	Tāneatua Rd	RB 16.2km		\$10,000
	F/gate structure detachable iron work replacement	Kope-Orini	LB 2.1km		\$30,000
		Subtotal			\$83,950
Pump Stations	Pump Inspections			\$3,049	\$5,300
(Kope-Orini,	Pump six month Inspection			\$7,235	\$1,900
Fortunes &	5 year maintenance			\$7,390	
Te Rahu stations)	10 year maintenance			\$9,450	
	Ancillary maintenance			\$7,494	\$2,000
	Electricity			\$48,000	\$60,000
	Fortunes pump station floodgate replacement	Fortunes Rd p/s			\$6,000
		Subtotal			\$75,200
Floodwalls	Misc. maintenance, incl sealant replacement. Stoplogs inserts & vegetation control	Boat ramp/Te Rahu/Waioho	Various		\$6,000
		Subtotal			\$6,000

	Work Type	Site	Location (km)	Annual Budget	Job Estimate
Containment sites	Misc. maintenance & mowing	Keepa Road and SH 30	Separate budget		\$0
		Subtotal			\$0
		SUBTOTAL - STOPBANKS, FLOODGATES, PUMP STATIONS, FLOODWALLS, CONTAINMENT SITES			\$257,150
		SUBTOTAL - Whakatāne River			\$621,150
Tauranga River					
Confluence to Barsdell's (30km)	Channel & river bank weed spraying	Faulkner's		\$14,406	\$25,000
		Subtotal			\$25,000
	Tree clearing/mulching/layering			\$38,862	
	Tree burning	Wallace, Clarke & Fleming's,	Various		\$6,000
	Mulching pampas	M Falkner & Browns	R&LB 24 - 26km		\$6,000
		Subtotal			\$12,000
	Planting			\$20,084	
	Willow pole and native planting	Various sites			\$12,000
		Subtotal			\$12,000
	Rock replenishment			\$38,100	
		Subtotal			\$0
	Fencing	Various Sites		\$0	\$5,000
		Subtotal			\$5,000
	Beach shaping/ripping to loosen gravel			\$75,682	
	Beach ripping	Various	RB and LB		\$10,000
	Overflow channel cuts	Various	RB and LB		\$24,000
		Subtotal			\$34,000
		SUBTOTAL - Tauranga River			\$88,000
	Maintenance Works Only			\$690,744	\$717,150
	Annual Flood Repairs			\$193,500	\$147,000
	Overall Totals			\$884,244	\$864,150

MEMORANDUM



To: Whakatāne-Tauranga Rivers Scheme
Advisory Group

For period 1 February to 31 July 2021

From: Paula Chapman
Project Manager - Flood Recovery

Date: 25 August 2021

File Ref: A3910520

Subject: Status Report - April 2017 Flood Repair Project (1 February to 31 July 2021)

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 event resulted in significant damage to river and drainage networks and assets across the region.

1 Programme Update

1.1 Programme update summary

- The flood recovery project is substantially complete with only a small number of site repairs outstanding in the Whakatāne-Tauranga and Rangitāiki-Tarawera Rivers Schemes.
- The process for claiming eligible costs from central government has been ongoing, as the programme has progressed. Claim 14 was approved in July and a final claim to the National Emergency Management Agency (NEMA) for essential infrastructure repairs will be made in June 2022. The total amount received from central government to date is over \$10 million.
- Three progress payments for Infrastructure Insurance have been approved totalling \$3,600,000 and discussions are underway to finalise the claim.
- The Material Damage and associated Business Interruption insurance claim for all pump damage has been settled and received, this totaled \$1,501,719 (gst inclusive).
- Of the total 108 sites originally identified for the Whakatāne-Tauranga Rivers Scheme, work has been completed on 74 sites, 19 lower priority sites have been reassessed as work no longer required and 15 sites are outstanding to be reconsidered or completed before 30 June 2022.

1.2 Communications, community and stakeholder engagement

- Council continues to input into the regular established communication channels such as the Edgecumbe Collective Newsletter and the Regional Council website to keep the community informed on progress. The project page is included on Council's website. <https://www.boprc.govt.nz/floodrepairs>

1.3 Programme Risks and Issues

Risk/Issue	Description	Action/management	Owner
Weather	Severe weather event may cause new damage	Review remaining sites against new works (annual flood damage)	BOPRC NEMA Insurer
Programme length	Some works unable to be completed as part of programme	Reassess at year-end and undertake works alongside annual maintenance.	BOPRC

2 Financial – Whakatāne-Tauranga Rivers Scheme

Forecast costs - total programme

Original estimated total programme cost – Whakatāne-Tauranga	\$11,583,000
Current estimated total programme cost – Whakatāne-Tauranga	\$8,945,000
Estimated betterment value	\$3,493,000

Expenditure and Revenue

Year	Expenditure budget	Expenditure actual infrastructure works
2017/18	\$2,850,000	\$1,652,996
2018/19	\$3,366,000	\$1,668,824
2019/20	\$3,127,200	\$2,726,965
2020/21	\$2,400,000	\$709,005
2021/22	\$716,800	\$3,100
Total	\$12,460,000	\$6,760,890
		Revenue recovery for infrastructure works
To date 2017-2021		3,187,291

3 Expected progress within the next six month period

- Progress remaining Whakatāne-Tauranga Rivers Scheme Site repairs.
- Complete Infrastructure Insurance Claim.

Paula Chapman
Project Manager Flood Recovery

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



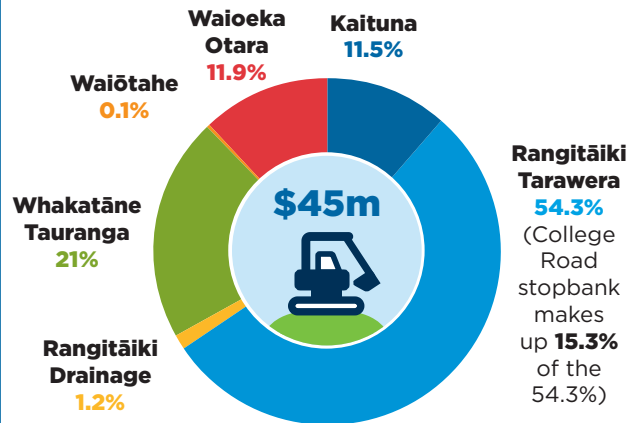
All repairs to
be completed by
30 June 2022

100% 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 217 complete ✓	Whakatāne Tauranga 108 sites 93 complete ✓	Waiōeka Otara 61 sites All sites complete ✓	Rangitāiki Drainage 53 sites All sites complete ✓
Kaituna 45 sites All sites complete ✓	Waiōtahe 31 sites All sites complete ✓	College Road stopbank realignment Complete ✓	Rangitāiki Drainage pump station repairs Complete ✓

500 SITES 96%
completed as at **30 June 2021**

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: Whakatāne-Tauranga Rivers Scheme
Advisory Group

From: Kirsty Brown
Rivers and Drainage Assets Manager

Date: 17 August 2021

File Ref:

Subject: General Business Update

Infrastructure Insurance Review

As previously advised, a review of our infrastructure insurance is currently underway. The purpose of this review is to look at ways of reducing the annual premium costs which has been steadily increasing over the years due to market conditions, flood events and increased asset value.

As part of the review, Aon Ltd (our insurance brokers) are leading a flood risk assessment with expertise input from Tonkin & Taylor.

The main objectives of the assessment is to:

- Quantify the frequency and financial consequences of flood damage to infrastructure assets.
- Identify assets most at risk of damage from flood to inform asset management, resilience strategies and risk financing.
- Ensure cost-effective and sustainable flood risk financing by reviewing risk tolerance, flood risk retention and disaster reserving strategies.

The assessment is in two stages. Stage 1 which involved the data assessment has been completed and Stage 2 which involves the risk identification, analysis and evaluation is underway.

Group members will be kept informed of progress.

Safeguarding Our Stopbanks Project

One of the key factors that affects the performance of flood protection assets like stopbanks or floodwalls, is landowner encroachments of unauthorised structures and plantings. This is particularly concerning on the Whakatāne River where unauthorised structures like pools, sheds, fences and large trees may have reduced the intrinsic strength of the critical asset (stopbank or floodwall).

A project titled “Safeguarding our Stopbanks” kicked off 1 July 2021 which is being led by Paula Chapman. The purpose of this project is to maintain community safety by

resolving situations where encroaching land use may have affected the integrity of the asset. The project has an urban focus and work has been going on in the background prior to the project commencing, in particular understanding the:

- Legal and policy basis for BOPRC to undertake the project.
- Rights of property owners (building legislation, existing use rights, boundary and fencing regulations, structural vs non-structural improvements.
- Ability for BOPRC to potentially undertake works on private property (should there be high-risk situations that owners will not/cannot resolve).
- Liaison with Local Authorities to align communications and community engagement.

The first phase of the project will involve targeted communications with property owners and occupiers adjacent to stopbanks. Potential issues identified will be prioritised and direct contact made with owners to enable investigation and remedy. In some cases this may involve removal of structural and non-structural improvements.

Member Feedback Survey

The river scheme advisory groups enable effective communication and liaison between scheme ratepayers and BOPRC Councillors and staff.

Although the group has no statutory basis or authority to make decisions, members input is highly valued and recommendations are taken into account on all scheme matters.

It has now been four years since the current advisory group format was implemented. In the next few months a survey will be circulated seeking feedback on how members feel the groups are going and whether any improvements that can be made.



Kirsty Brown

Rivers and Drainage Assets Manager

MEMORANDUM



To: Whakatāne-Tauranga Rivers Scheme
Advisory Group

From: Mark Townsend
Engineering Manager

Date: 26 August 2021

File Ref: A3911272

Subject: Gravel management update

1 General

There have been no extractions in the Whakatāne-Tauranga Rivers Scheme over the past six-month period (since the March Advisory Group report). Members are referred to the March 2021 report for previous gravel extraction detail.

An allocation that was pending in March of 2000m³ from the Rakuraku Site was not activated (location reference: Tauranga River XS 30-31, river distance 25.1 - 25.4).

2 Natural Environmental Regional Monitoring Network (NERMN) Report 2011-2018

The updated Bay of Plenty Regional Council Natural Environmental Regional Monitoring Network (NERMN) Report for River and Stream Channel Monitoring is to be published in September 2021 and made available on Council's website (<https://www.boprc.govt.nz/your-council/documents-and-publications/publications> – under Environmental publications).

The river and stream channel monitoring programme provides Council with:

- Data to help Council effectively manage the region's resources and meet its statutory obligations under the Resource Management Act.
- Information to identify the quantity of gravel present, and current extraction rates in the Bay of Plenty region.
- Data to allow setting sustainable annual extraction rates available based on river control and river maintenance criteria.

Cross section surveys are carried out regularly on 15 rivers and streams, with occasional additional surveys. The data, which has been collected since 1993-1994, is held in Council's cross-sections archive system. This is the main tool used to store and analyse the data.

Completion of the most recent monitoring programme adds to the baseline information for comparison with future surveys, and allows analysis of the surveyed rivers and streams. This helps develop an understanding of the movement of gravel in the river systems of the Bay of Plenty region.

Mark Townsend
Engineering Manager