Kaituna Catchment Control Scheme Advisory Group Meeting

Monday April 04 2022
10:00am

Waiariki Meeting Room
BOPRC Rotorua Office
1118 Fenton St
Rotorua

Kaituna Catchment Control Scheme Advisory Group Meeting

Monday 04 April 2022 at 10am

Agenda

1 **Welcome / karakia**

2 **Apologies**

3 **Notes of previous meeting held 28 September 2021**

4 **Matters arising from previous meeting**

a. Ford Pump Station Funding Update

5 **Engineering update**

6 **Operations update**

7 **Changes to the way BOPRC collects its rates**

8 **Finance report**

9 **Co-governance / community group updates**

10 **Land management**

11 **Current terms of reference review**

12 **General business**

a. Asset management general business report

b. Communications update

13 **Public forum**

14 **Meeting close / karakia**

Notes of the Kaituna Catchment Control Scheme Advisory Group meeting held at Te Puke War Memorial Hall on Tuesday, 28 September 2021, commencing at 10am

Chair: Councillor Norm Bruning

Advisory Group: Richard Weld, Barry Roderick (arrived 10:43am), Dave Hurst, Councillor John Scrimgeour (Western Bay of Plenty District Council – arrived 10:16am)

BOPRC Councillors: Councillor Matemoana McDonald, Councillor Jane Nees

BOPRC Staff: Kirsty Brown (Rivers and Drainage Assets Manager), Jo Heath (Rivers and Drainage Assets Coordinator), Bruce Crabbe (Rivers and Drainage Operations Manager), Kerry Smith (Area Engineer), Mark Townsend (Engineering Manager), Richard Lyons (Land Management Officer)

Public: Steve Crossan (local farmer)

Apologies: Roger Hintz, Nick Chater, Peter Dine (Rotorua Lakes Council), Chris Ingle (General Manager Integrated Catchments), Laura Albrey (Communications Partner)

1 Welcome

Councillor Bruning welcomed everyone to the meeting.

Richard Weld introduced local farmer Steve Crossan.

Kirsty Brown gave a Health and Safety briefing, including a reminder of the COVID-19 requirements for the meeting and within the venue.

2 Apologies

Apologies were received as recorded above.

3 Notes of previous meeting held 3 March 2021

Resolved

That the Kaituna Catchment Control Scheme Advisory Group:

Confirm the notes of the meeting held 3 March 2021 as a true and correct record.

Weld/Hurst
CARRIED

4 Matters arising from previous meeting

Bruce Crabbe provided an update on the Puke Pine issue. Regional Council, as scheme managers, submitted to the Resource Consent hearing seeking financial assistance for the contamination remediation of scheme managed drains. The commissioner did not support the submission. Rivers and Drainage Operations staff have been desilting Factory Drain with half now completed and 1.5 km through the Verwey farm to be cleaned in February once the maize has been harvested. Also working in conjunction with Western Bay of Plenty District Council as they also administer a drain in the area.

A submission to the LTP was made by the Advisory Group requesting that funding for the Ford Road pump station be 50% targeted rate and 50% general rate. Through deliberations, Council decided to retain the 80% targeted and 20% general rate funding formula.

ACTION:
Circulate the detailed staff response to the Advisory Groups submission to the Long Term Plan with regard to changing the funding ratio for the Ford Road Pump Station replacement.

5 Scheme annual report 2020-2021

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

Key points:

- The 2020-2021 Kaituna maintenance programme was delivered generally on budget and to programme.
- The 2020-2021 Kaituna capital programme includes large multi-year projects which are largely on track with some programme slippage provided for through budget carry forward funding recommendations.
- All 45 Kaituna sites identified during the April 2017 flood event are now complete, or have been re-inspected and assessed as no longer required.
- **Operating revenue** was $135,000 lower than budget, mainly due to lower than forecast interest rates (the call rate sat at 1.5% for the year)
- **Operating expenditure** was $76,000 higher than budget
- This resulted in an **operating deficit** of $211,000
- **Capital revenue** was $2,253,000 lower than budget, due to capital works with insurance recoveries and CIP funding delays
- **Capital expenditure** was $3,229,000 lower than budget, with carry forwards into 2021-2022 proposed for a number of projects
- **Total reserve fund** opening balance of $5,567,000 and closing balance of $5,535,000 (decreased by $32,000)
- **Loan** opening balance of $8,743,000 and closing balance of $7,902,000 (decreased by $841,000)
- **Asset valuation** as at 1 July 2020 of $70.7 million – with the 2021 annual revaluation currently underway

ACTION:
Finance team to provide an explanation as to why external interest income, for the year ending 30 June 2021, was $108,000 lower than budget.

6 Capital work programme

Mark Townsend spoke to the agenda report and delivered a presentation.

Key points:

- Council has approved Option 1 for the Ford Road pump station replacement – additional pump capacity at the Diagonal Dain pump station. In 2021-2022 the focus will be on detailed design and consenting, followed by construction in 2022-2023 ($7.9m) and decommissioning the Ford Road pump station in 2023-2024 ($1.9m). Design options include an axial flow pump (like in existing pump stations) versus an Archimedean screw pump. The Archimedean screw pump has higher upfront costs and lower long-term costs. Waikato Regional Council has several Archimedean screw pumps and have found they require less ongoing maintenance with no need for weed screens. They are also fish friendly. Ongoing consultation is planned with those affected by the proposal.
- Regional Council has raised concerns with Tauranga City Council (TCC) about the design of Pond G. An independent review by Pattle Delamore Partners (PDP) supports the Regional Council view that the pond does not provide enough storage. Data is currently being collected for both Pond H and G from level sensors and outlet flow sensors.
- Utuhina Stream modelling has shown that raising the stopbanks would just move the issues further upstream. Regional Council are working with Rotorua Lakes Council on possible options, which could include retreat from some areas in the long-term.
- Supply chain issues for sheet piles coming from overseas has delayed the Kaituna Mole project. Construction now scheduled to be completed by December 2021, with Western Bay of Plenty District Council responsible for the proposed carpark development and associated landscaping.
- Surplus Waka Kotahi land between the Tauranga Eastern Link and Bell Road pump station is being considered for purchase with the intention to develop as a wetland and flood storage. The land area is 10 hectares and valued at around $185,000.

Attendance: Barry Roderick arrived at 10:43am

Questions/Discussion:

- Concern was expressed about the amount of residential development that is impacting the scheme. Staff explained that through the land use consenting process developers need to show they can mitigate the effects of the development. Regional Council has input in to this process on behalf of the scheme and the environment.
- Members recommended that the Ford Road pump station not be decommissioned until there was proof that the new option is working. Staff advised that the plan is to decommission the Ford Road pump station the year after the new pump station is constructed and commissioned.
- The advisory group's LTP submission regarding funding for the Ford Road pump station was discussed, with members questioning why Council did not support the requested 50% targeted and 50% general rate funding scenario. Councillor Bruning responded that the area had received a lot of government funding that was reducing costs to the scheme and that landowners were not being disadvantaged in any way. Members

highlighted that the scheme was being disadvantaged by time delays and escalating costs.

7 Maintenance work programme

Bruce Crabbe spoke to the agenda pack report, and Kerry Smith delivered a presentation focusing on two projects from the maintenance programme – Raparapahoe Canal and drop structure and Ngongotahā floodway maintenance.

Key points:

- The berm of the Raparapahoe Canal had significant silt build-up that was reducing the canal's flood capacity. A staged process is underway to: remove unwanted vegetation, lower the berm, rock armour corners at risk from erosion, widen stopbank crest, create better access points, and toe load the landward side. 1.5 km of the left bank has been completed, with other stages planned.
- Staff have been working on perfecting hydroseeding with native grasses. A native grass seed nursery has been developed and several hydroseeding techniques trialled on the Raparapahoe job, including pre-germinating the seeds.
- The drop structure on the Raparapahoe Canal has undergone a major upgrade after Environmental DNA (eDNA) testing identified that the structure was a barrier to four of the ten fish species identified as being present in the area. A post construction assessment will be undertaken to see if passage has been re-established for common smelt, common galaxias (inanga), shortfin eel and rainbow trout.
- The 2018 Ngongotahā flood event caused new erosion and damage to existing rock erosion protection along Ngongotahā Stream, and silt and vegetation build up on the six floodways. The floodways have been cleared and good access to the sites re-established. Staff also worked with Fish and Game to create fish habitat within suitable areas of the stream while the repair work was being undertaken.

Discussion:

- Members asked if any fish passage remediation was being proposed at the Tauranga City Council water supply weir on the Waiāri Canal where whitebait are visibly trapped by the diversion structure. Staff were not aware of the issue and will investigate.

8 Co-governance and freshwater community group updates

There was nothing to report from Te Maru o Kaituna or from the freshwater community groups.

9 General business

9.1 General business report

Kirsty Brown spoke to the agenda report.

Key points:

- Simon Harris from Land Water People Limited shared the rating review methodology and findings with advisory group members at a special meeting in August. Additional work is underway to update the draft report and include an alternative mechanism for estimating changes to impermeable surfaces in Te Puke.
- A review of river scheme infrastructure insurance is currently underway to look at ways of reducing annual premium costs. Stage 1 of the review is complete and involved assessment of the data. Stage 2 is in progress and involves risk identification, analysis and evaluation. Since the agenda report was written, a draft review report has been received from Aon Ltd and will be discussed by Council at the next Risk and Assurance Committee meeting.
- A project called *Safeguarding our Stopbanks* started on 1 July 2021 with the purpose of maintaining community safety by resolving situations were encroaching urban land use has affected the structural integrity and performance of our flood protection assets. The project has an urban focus and looks at situations were landowners have developed land beyond their legal property boundary in areas where there are stopbanks and floodwalls. The focus in the Kaituna Catchment Control Scheme will be on the Utuhina Stream and the Waingaehe Floodway where landowner encroachments have been identified as a concern.
- It has been four years since the current advisory group format was implemented and a member survey will be circulated soon seeking feedback on how members feel the group is going and whether any improvements can be made.

9.2 River scheme website demonstration

Jo Heath outlined the new look river scheme page on the Regional Council website and asked for members' feedback either after the meeting or via email/phone.

https://www.boprc.govt.nz/environment/climate-change/flood-protection/rivers-and-drainage

Site will be a useful tool for advisory group members to refer members of the public to for information on capital projects in the area. Also developing a registration process for people to receive notifications when a page is updated.

9.3 Environmental data portal demonstration

Mark Townsend outlined the new Environment Data Portal on the Regional Council website https://www.boprc.govt.nz/environment/maps-and-data/environmental-data.

10 Public forum

- Cycleways and walkways along stopbanks was discussed and members questioned who has the right to grant permission to use the stopbanks. Staff explained that any activity on a stopbank requires a Flood Protection and Drainage Bylaw Authority from Regional Council. If the land under the stopbank is privately owned the development would need the landowner's permission.

- Richard Weld asked if the settings on the Diagonal pumps had been altered as he has observed a lot of weed build up and the screens are full of weeds. Also noted that the water was high but the pumps weren't working. Staff responded that there had been issues with the probes not being set correctly. The probes at the Maketū pump station were reset last week and the Diagonal ones will be reset this week.
- The government's three waters reform was discussed, The reform focuses on reticulated systems managed by district and city councils – drinking water, waste water and stormwater. It does not include Regional Council's flood protection and land drainage responsibilities, however Council is keeping a watch on the reforms.

Meeting closed at 12:00 pm

Action Sheet

Kaituna Catchment Control Scheme Advisory Group Meeting

28 September 2021

Action	Person Responsible	Completed	Comment
1. Finance team to provide an explanation as to why external interest income, for the year ending 30 June 2021, was $108,000 lower than budget.	Kirsty Brown	✓	Finance team response circulated 22/11/21 (refer A3980965)
2. Circulate the detailed staff response to the Advisory Groups submission to the Long Term Plan with regard to changing the funding ratio for the Ford Road Pump Station replacement.	Mark Townsend	✓	Advisory group submission, Council response to submission, and staff detailed response circulated 22/11/21 (refer A3980965)

Kaituna Catchment Control Scheme

Capital Works Programme 2021-2022

The following table outlines the Kaituna Catchment Control Scheme capital work programme for 2021-2022.

Budget figures are from the Long Term Plan 2021-2031 and revised figures incorporate carry forward funding from 2020-2021 or deferred funding to 2022-2023.

Kaituna Catchment Control Scheme Capital Budget for 2021-2022 is $5,360,416 (LTP Year 1 revised budget)

Project name and background	LTP Year 1 Budget 2021-2022	Revised budget 2021-2022	Milestones 2021-2022	Update February 2022
Kaituna Pump Station Electronic Upgrades This is a multi-year project involving progressively upgrading pump station electronics. In 2021-2022 the focus is on the Kopuaroa Pump station.	**$97,280**	**$97,280**	• Complete Kopuaroa pump station electrical, switchboard and telemetry upgrade	• Upgrade work underway • On budget and on track for completion by 30 June
Ford Road Pump Station Upgrade The purpose of the Ford Road pump station upgrade is to maintain levels of service for drainage and flood mitigation, improve operational issues, improve discharge water quality and allow for climate change. Council has approved the option to provide additional pump capacity at the Diagonal Drain pump station located upstream of the Ford Road site. This project includes: • A new pump station adjacent to Diagonal Drain pump station • Decommissioning of the existing gravity outlet and gates at Ford Road • Widening 1600 metres of existing drains and upgrading x 2 culvert crossings *The project works are planned through to 2023-2024* **For information and updates visit the Project Page or www.boprc.govt.nz/our-projects/ford-road-pump-station-upgrade**	**$800,000**	**$996,000** (includes $196,000 carried forward from 2020-2021)	• Ongoing consultation with iwi and stakeholders on preferred options • Assessment of environmental effects of final preferred option • Resource consent application • Detailed design	• Work and information to inform the resource consent is underway based on the concept design • Detailed design work is planned and includes geotechnical investigation scheduled for March • The programme is focused on having the consent lodged by 30 June 2022 • Iwi and stakeholder engagement continues

Project name and background	LTP Year 1 Budget 2021-2022	Revised budget 2021-2022	Milestones 2021-2022	Update February 2022
Te Puke Stormwater This modelling work will quantify the extent to which development in Te Puke is affecting the Kaituna Scheme. DHI have been appointed to undertake the modelling required with assistance from Blue Duck Limited. Western Bay of Plenty District Council are part of the project team. This project started in 2019-2020 and modelling and optioneering is scheduled to be completed in 2021-2022 with resulting mitigation works now programmed for 2022-2023.	**$2,560,000**	**$133,000** (major works deferred to 2022-2023)	• Finalise modelling report • Undertake option modelling • Detailed design	• Modelling report is complete and has been approved by BOPRC and WBOPDC • Scoping of Stage 3 work is due to get underway together with Western Bay of Plenty District Council. The purpose of Stage 3 is to identify and recommend mitigation options to offset any adverse effects on the drainage scheme
Utuhina Stream Stopbanks The primary purpose of this project is to review the capacity of the existing stopbank infrastructure and design any mitigation needed to maintain or achieve the agreed level of service. *There is also budget for this project in 2022-2023*	**$645,120**	**$100,000** (mitigation work deferred to 2022-2023)	• Option assessment including modelling • Consultation with iwi, Rotorua Lakes Council and stakeholders on preferred option(s)	• Modelling of high level options is finished for current land use and climate change implications • Rotorua Lakes Council (RLC) is preparing a stormwater master plan and an Intensification Plan Change • BOPRC will provide support to RLC on iwi and stakeholder engagement for future flood risk mitigation for this catchment • Work is on hold until we have a better understanding of imminent catchment changes and community aspirations
Kaituna Mole Upgrade The Kaituna Mole is a river mouth control structure located at the mouth of the Kaituna River. Various improvements have been made over the years to strengthen the structure and support its considerable use by the community as a popular fishing spot. The remedial work involves a design similar to the current mole but with	**$577,536**	**$1,964,536** (includes $1,387,000 carried forward from 2020-2021)	• Complete upgrade and landscaping work	• Physical works for the upgrade reached practical completion in December 2021 and the mole was made available for public use at that time • Some minor finishing works are underway • Landscaping and toilet works are planned in conjunction with

improved corrosion resistance and concrete capping necessary to maintain the integrity of the existing structure. Construction commenced July 2021. *Central Government Climate Resilience Funding has been approved for this project.* **For information and updates visit the Project Page or www.boprc.govt.nz/our-projects/kaituna-mole-upgrade**				Western Bay District Council • Final project costs are expected to be under budget

Kaituna Mole Upgrade – February 2022

Project name and background	LTP Year 1 Budget 2021-2022	Revised budget 2021-2022	Milestones 2021-2022	Update February 2022
Upper Kaituna Stopbank Modelling This modelling is part of the Capacity Review of the Rotorua Streams (Upper Kaituna) – Waiteti Stream, Ngongotahā Stream, Waiowhero Stream, Utuhina Stream, Puarenga Stream, and Waingaehe Stream.	**$51,200**	• **51,200**	• Complete hydrological and hydraulic modelling of the Puarenga and Waingaehe Streams	• Hydrological modelling has been completed for both the Puarenga and Waingaehe • Modelling work is underway for the Puarenga Stream • Waingaehe modelling work is underway in conjunction with RLC
Ngongotahā Stream Flood Mitigation – Civil Works Project involves implementing the	**$1,638,400**	**$2,018,400** (includes $380,000	• Complete consultation and resource consent	• Ngongotahā consultation with key stakeholders continues for the

recommendations of the independent Ngongotahā Stream Review. Following analysis of initial flood modelling outcomes a suite of options were developed and presented to the Community Reference Group. *Central Government Climate Resilience Funding has been approved for this project.*		carried forward from 2020-2021)	application • Detailed design • Complete high flow bypasses, Western Road raising, stopbank works and southern bypass • Tree removal in upper catchment • Detention dam construction in upper catchment	civil works. Access to one property is still to be agreed • Major physical works have been deferred to the next construction season, however some high flow bypass work is to begin this month and design work continues • NB Upper Catchment Work Year 2 tree removal and detention dams are underway
Other projects – Bell Road modelling Modelling has been undertaken to determine whether the drainage level of service is being met and what mitigation options could be utilised to maintain the level of service. Modelling has shown that the level of service is not being met in large areas. Mitigation options do not reduce the areas significantly and climate change effects would be difficult to manage into the future. Recommendation is to reduce the level of service and retire farmland as it becomes uneconomical to farm.	**Unbudgeted**		• Complete climate change modelling • Arrange independent review of recommendation	• Climate Change modelling was completed in December 2021. However, new ground level information (Lidar) became available in December which will improve the reliability of the results. Decision has been made to rerun the modelling using this new data. Delivery is due end of May 2022

Kaituna Catchment Control Scheme

Maintenance Programme 2021-2022

The purpose of this report is to provide an overview of the Kaituna Catchment Control Scheme maintenance work programme for 2021-2022.

Maintenance work programme

Maintenance works comprise of 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 Asset Management Plan taking into account asset lifecycle, and maintenance and inspection schedules. Maintenance programme budgets are set during the Long Term Plan and Annual Plan processes.

Scheme maintenance work includes:

- drain maintenance - desilting, de-weeding, weed spraying, and water quality improvements
- pump stations - operation, weed clearing, inspections and maintenance
- culvert and floodgates - inspections and maintenance
- stopbanks - inspections, maintenance, repairs, and pest control
- river maintenance - pest plant control, vegetation maintenance, beach shaping, habitat enhancement works
- erosion control - rock refurbishment, edge planting, trenched willows, willow maintenance
- annual flood damage repairs and flood response (e.g. emergency pumping) during heavy rain events.

Key projects in 2021-2022:

The general maintenance programme is on track, with progress updates on some of the key projects below:

- Desilting of Factory Drain downstream of Pukepine (Verwey property - 2nd and final stage) has been completed.
- Maketū Estuary stopbank rock replenishment work has been completed.
- Working with Land Management staff and property owner to rebatter and riparian plant a section of Singleton's Drain, (including a culvert and weed screen) to improve discharge water quality (following Dairy NZ best practice guidelines).
- Rockworks have been installed on Waitetī Stream to replace a dilapidated retaining wall.
- Restoration work has been completed on two Ngongotahā Floodway overflow channels.
- Erosion repair work completed on the Waingaehe, Waitetī, Otamatea and Mangakakahi Streams. Further work still ongoing.

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 that 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 Kaituna Control Catchment Scheme a permanent stockpile of 2,000 tonnes will be established and maintained at the Young Road site (PGG Wrightson's saleyards). Resource consent and occupancy arrangements are complete and placing of rock in stockpile is well advanced. The purpose of the permanent stockpile is 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. The rock materials referred to are not additional costs, and are included within existing budgets.

All suppliers will also 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 Kaituna Catchment Control maintenance programme is shown below followed by a more detailed breakdown of the programme with estimated costs of proposed work. The annual budget figures include operational costs only and exclude non-operational costs (e.g. debt servicing and infrastructural asset insurance).

Kaituna Catchment Control Scheme Maintenance Works Programme 2021-2022		
Lower Kaituna		**Annual Budget**
	General	$17,000
	Reach 1 (River mouth to Te Matai)	$124,900
	Reach 2 (Te Matai to Paraiti River)	$46,600
	Reach 3 (Canals and Drains)	$308,600
	Pump Station Maintenance	$247,000
	TOTAL LOWER KAITUNA	**$744,100**
Upper Kaituna		
	Reach 4 (Rotorua Streams)	$120,400
	Reach 5 (Ōhau Channel)	$77,800
	TOTAL UPPER KAITUNA	**$198,200**
Annual Flood Damage		
	Annual Flood Damage Repair Allowance	**$218,300**
	KAITUNA TOTALS	**$1,160,600**

MEMORANDUM

BAY OF PLENTY REGIONAL COUNCIL TOI MOANA

To: Kaituna Catchment Control Scheme River Advisory Group

From: Kirsty Brown
Rivers and Drainage Assets Manager

Date: 8 March 2022

File Ref: A4051543

Subject: **Changes to the way BOPRC collects its rates**

Since the Bay of Plenty Regional Council was established in 1989, its rates have been invoiced and collected by the seven city and district councils across the region.

From August 2022, Council will start collecting its own rates. The priority reason for the change is to become more transparent and accountable for the work we do.

Ratepayers will receive one invoice from Council in late August-September 2022, which will be due 20 October.

Andy Dixon, Council's Treasury and Tax Specialist, will be presenting an outline of the project to the group. This will include:

- Why Council is moving to rates self-collection.
- The changes ratepayers will see and the expected effect of those changes.
- Advantages of rates self-collection in the future.

Kirsty Brown
Rivers and Drainage Asset Manager

Kia rite mai i te panonitanga
Get ready for change

BAY OF PLENTY REGIONAL COUNCIL
TOI MOANA

From July 2022 how your Bay of Plenty Regional Council rates are invoiced and paid is changing.

He aha ngā pānga o te panonitanga ki a koe
What the change means for you.

If you are a ratepayer, your Bay of Plenty Regional Council rates will no longer be invoiced by your city or district council. Instead, you will be invoiced by Bay of Plenty Regional Council and you will pay your rates directly to us.

He aha te take o te panonitanga?
Why the change?

We want to be more transparent and accountable for the work we do for you using your rates.

By invoicing you directly, you will have better visibility of where your money is spent to create a healthy environment, freshwater for life, safe and resilient communities, and a vibrant Bay of Plenty region.

He aha e whai ake nei? What happens next?

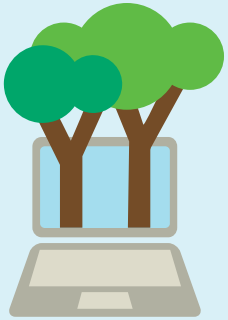
July new rates year → **August – September** receive your Regional Council invoice → **20 October** Regional Council invoice due

You can sign-up to pay by direct debit or get your rates invoice by email at any time

Your city or district council will continue to send you rates invoices for the services that they provide.

You can keep updated about the change in rates collection by going to boprc.govt.nz/rates or call our Contact Centre on 0800 884 880

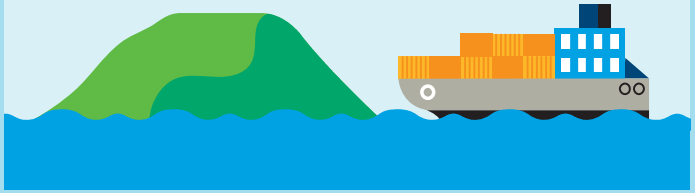
Be green, go paperless.
Get your rates invoice by email.



You can help us reduce the impacts of climate change by receiving your rates invoice and communications by email rather than via post. If you don't already get your invoice by email visit **boprc.govt.nz/rates** to sign up now.

Did you know...

Our work is funded by a mix of rates, fees, charges, grants and investment income. Through our investment in Quayside Holdings Limited **the average rates bill in 2021/22 was reduced by around $350 per property,** a significant saving for ratepayers across the region.



Ngā kaupapa e tautokohia e āu reiti

The work your rates help fund

Catfish removed from Rotorua Te Arawa Lakes

60,000*

Number of public transport trips taken

2.66M*

Water quality testing sites

270+

Natives planted for environmental protection

870,000*

Visitors to Regional Parks

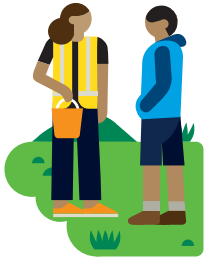
120,000*

Spoke with

14,800*

harbour and lake users to educate them and keep them safe

Pollution hotline calls investigated **3,736***



Support of volunteer groups

50+

Inspections for pests

4,725*

Stopbanks for flood protection

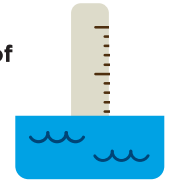
380km

Environmental consent checks

4,861*

Water level monitoring sites to protect against the impact of both flooding and droughts

680+



* Latest annual figures

What's the difference between the Regional Council and city and district councils?

We look after the environmental management of the region, including protection of the region's land, air and water. We also respond to pollution events and take a lead role in animal and plant pest management. We have an active role in minimising risks from natural hazards, making sure you're safe when on the water along our coast and on our lakes and rivers, and we provide public transport.

City and district councils deliver the services you use day to day. This includes quality drinking water, wastewater and stormwater, roads and rubbish collection, as well as providing community facilities such as parks, cycleways, community halls, libraries, swimming pools and sports fields.

Why do I have to pay rates to two councils?

Every council in New Zealand, including regional councils and city and district councils, collect rates income to help fund the work they're required to do by law.

Do I need to do anything right now?

The first Bay of Plenty Regional Council rates payment isn't due **until the end of October 2022.** If you already receive a city or district rates invoice by email you don't need to do anything. If you want to receive your invoice by email sign up at **boprc.govt.nz/rates** otherwise your rates invoice will be delivered by mail.

You can keep updated about the change in rates collection by going to boprc.govt.nz/rates or call our Contact Centre on 0800 884 880

BAY OF PLENTY REGIONAL COUNCIL
TOI MOANA

Bay of Plenty Regional Council - Toi Moana
Statement of revenue and expense: Kaituna Catchment Rivers Control Scheme

For the 6 months ending 31 December 2021

		Year to date		Variance			Annual		Variance	
		Budget	Actual	$	Variance indicator	Variance commentary	Revised Budget	Forecast	$	Variance indicator
		$000					$000			
Line	**Operating revenue by class**									
1	General rates	110	110	0	-		221	221	0	-
2	Targeted rates	1,051	1,051	0	-		2,102	2,102	0	-
3	External interest income	61	22	(39)	Lower	Lower interest rates on reserves than budgeted.	122	36	(86)	Lower
4	Other revenue	28	14	(14)	Lower	Contribution Te Paurepo o Kaituna and rates in lieu from DOC.	30	16	(14)	Lower
5	Investment income	172	172	0	-		344	344	0	-
6	**Total revenue**	**1,422**	**1,369**	**(53)**	Lower		**2,819**	**2,719**	**(100)**	Lower
7	**Operating expenditure by class**									
8	Administration expenses	2	14	12	Higher	Other insurance costs higher than budget.	6	31	25	Higher
9	Other expenses	200	170	(30)	Lower	Additional material and fuel costs have been offset with reduced infrastructual insurance and electricity costs. Expecting to be close to budget at year end.	411	394	(17)	Lower
10	Consultancy fees	0	4	4	Higher		0	4	4	Higher
11	Contract work	294	192	(102)	Lower	Lower contract work but expecting to be close to budget at year end.	696	662	(34)	Lower
12	Depreciation and Amortisation	180	178	(2)	Lower		361	359	(2)	Lower
13	**Subtotal - expenditure**	**676**	**544**	**(132)**	Lower		**1,474**	**1,450**	**(24)**	Lower
14	**Net overhead charges and recoveries**	**548**	**703**	**155**	Higher	Additional staff time spent in the scheme	**1,096**	**1,251**	**155**	Higher
15	**Total operating expenditure**	**1,224**	**1,247**	**23**	Higher		**4,044**	**4,152**	**108**	Higher
16	**Total operating surplus (deficit)**	**198**	**122**	**(76)**	Unfavourable		**(1,225)**	**(1,433)**	**(208)**	Unfavourable

Bay of Plenty Regional Council - Toi Moana
Statement of revenue and expense: Kaituna Catchment Rivers Control Scheme

For the 6 months ending 31 December 2021

		Year to date		Variance			Annual		Variance	
		Budget	Actual	$	Variance indicator	Variance commentary	Revised Budget	Forecast	$	Variance indicator
		$000					$000			
17	**Capital revenue by class**									
18	Capital funding	877	1,048	171	Higher	Central government funding for Kaituna mole	3,129	1,728	(1,401)	Lower
19	**Total capital revenue**	**877**	**1,048**	**171**	Higher		**3,129**	**1,728**	**(1,401)**	Lower
20	**Total surplus (deficit)**	**1,075**	**1,170**	**95**	Favourable		**1,904**	**295**	**(1,609)**	Unfavourable
21	**Capital expenditure by project**									
23	Kaituna pump station electronic upgrades	49	2	(47)	Lower		97	75	(22)	Lower
24	Ford Road Pump Station	400	60	(340)	Lower	Iwi and stakeholder engagement underway. Consent application preparation underway. Programme allows application to be lodged 30 June 2022.	996	300	(696)	Lower
25	Te Puke Stormwater project	1,280	15	(1,265)	Lower	Works to be pushed out to 2022/23	2,693	101	(2,592)	Lower
26	Utuhina stream stopbanks	323	12	(311)	Lower	Works to be pushed out to 2022/24	1,028	83	(945)	Lower
27	Kaituna Mole	578	1,382	804	Higher	Physical works have now been completed. Working with WBOPDC regarding landscaping options.	1,965	1,518	(447)	Lower
28	Upper Kaituna stopbank modelling	26	0	(26)	Lower		188	38	(150)	Lower
29	Ngongotaha Stream Civil Works	0	15	15	Higher	Landowner approval outstand (A&P Association). Physical works to be pushed out to 2022/23 construction season. Operations work to be completed this financial year.	2,018	595	(1,423)	Lower
30	**Total capital expenditure**	**2,656**	**1,486**	**(1,170)**	Unfavourable		**8,985**	**2,710**	**(6,275)**	Unfavourable

31	**Reserves**	Opening Balance	Movement	Closing Balance	
32	Flood Damage Reserve	1,889	162	2,051	Funds available
33	Asset Replacement Reserve	1,420	(70)	1,350	Funds available
34	Works Reserve	827	(35)	792	Funds available
35	NZTA Reserve	615	9	624	Funds available
36	Remediation Reseerve	500	7	507	Funds available
37	**Total Reserves**	**5,251**	**73**	**5,324**	**Funds available**

38	**Loans**	Opening Balance	Movement	Closing Balance
39		7,902	(13)	7,889

40	**Asset Valuation**	Balance 01/07/2020	Movement	Balance 01/07/2021
		76,386	911	77,297

MEMORANDUM

BAY OF PLENTY REGIONAL COUNCIL TOI MOANA

To: Kaituna Rivers Scheme Advisory Group

From: **Jackson Efford** **Date:** 21 February 2022

From: Principal Advisor, Land & Water

Subject: **Best practice lowland drain management**

The purpose of this report is to provide Advisory Group members a brief overview of recommended best practice drain management techniques, and outline Council's progress and experiences upgrading some drains established to this standard in the Kaituna catchment.

What is best practice drain management?

DairyNZ and others have outlined best practice standards for lowland drain management (***Figure 1***). Progressively planning for and then implementing these standards is one important action that can be taken now within the catchment. These improvements will positively contribute towards water quality improvements, the required to meet water policy targets and help ensure the long-term sustainability of the lowland drain network. The DairyNZ drain management standards suggest that ideally:

- Drains should be fenced both sides with at least 3 wire electric fencing to ensure cattle of all ages are excluded (with netting or 7-9 wires required for sheep and goats).
- Fence set-backs from the top of drain banks should be a minimum of at least 1.5 meters to allow for a good vegetated grass filter strip on one side (over which the drain can be maintained with machinery), and ideally with a wider 3 meter native planted strip on the other side (if possible, the northern-most side) to provide drain shading (also cools water and minimises weed growth reducing maintenance requirements).
- Drain banks should be battered to a minimum of 1:1 or 45° slope creating a 'V' profile where possible, which theoretically concentrates low flows during summer and minimises weed growth, as well as maximising capacity in floods. This profile also helps to reduce bank slumping and maintenance costs, and provides a gentle sloped buffer which grass can establish on, with more opportunities to strip sediments. For example, grass buffers have been shown to remove up to 90% of suspended sediments and up to 80% of phosphorus, as well as faecal bacteria associated with agricultural run-off.

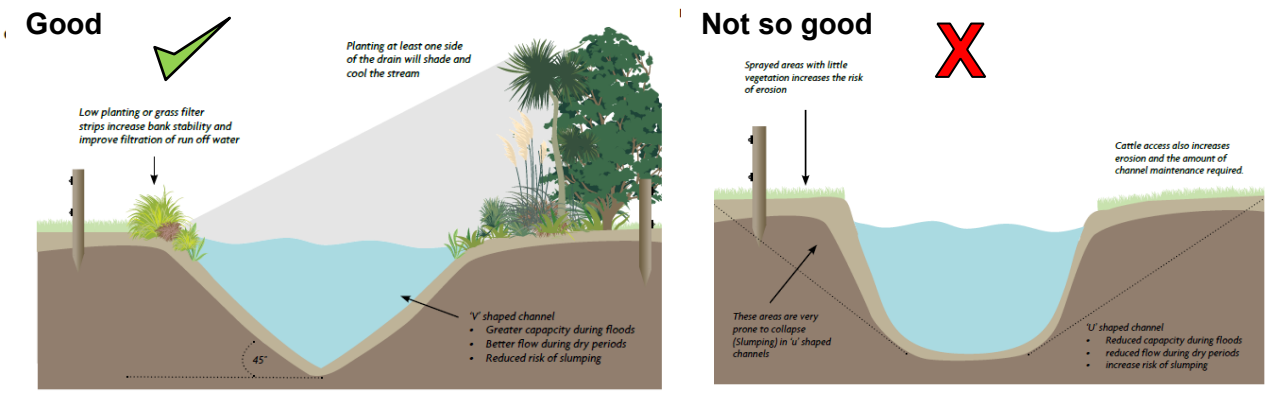


Figure 1: *DairyNZ schematic of proposed best-practice drain upgrade works (left) and current state of most BOPRC drains (right).*

Likely benefits of the works include:

- 'V' shaped batters give greater capacity during floods, better flow during dry periods and reduce the risk of bank slumping.
- Grass filter strips increase bank stability and improve filtration of runoff water.
- Wider fence setbacks ensure no direct faecal contamination from livestock can occur.
- Native planting provides aesthetic and biodiversity benefits including corridors for birds and woody debris for fish.
- Shade from native planting also reduces drain water temperatures, improving fish habitat and reducing nuisance aquatic weed growths (potentially reducing maintenance). Livestock may also benefit from new shade.
- Carbon sequestration; greenhouse gas offset potential may exist from plantings in a farm emissions pricing/trading scheme.
- Cut material from re-battering could be used to re-contour low areas in paddocks.
- Works may help achieve compliance with Freshwater-Farm Plans, new Regional Plan rules, and future consenting of scheme activity such as pump station upgrades and scheme maintenance activity.

Possible negatives include:

- Vegetation maintenance issues (e.g. releasing and weed/pest plant control etc.).
- Vegetation may short out electric fences.
- Tall vegetation or wider fence setbacks may obstruct line of sight/access for mechanical drain cleaning (setting fence closer on one side with low vegetation only will help).
- Vegetation may block pump stations during flood events (species selection can help reduce risks, e.g. no cabbage trees).
- Paddock spraying for pasture renewal, cropping, pasture weeds etc. may affect native plantings if spray drift occurs or no buffer is left.
- Increased pest animal problems in vegetation (possums/rats etc).
- Loss of pasture land from wider fence set-backs.
- Drain batters may not last over time, as drain banks grow vegetation and then slump, becoming more 'U' shaped again over time and requiring new maintenance.

Figure 2: *Example of a Kaituna farm drain where the best practice standard has been implemented. One side of the drain has tall native vegetation providing biodiversity and shading benefits, while the other side has low native sedges to intercept runoff and over which digger maintenance can easily occur if required.*

Drain water quality and Regional Councils progress with best practice drain upgrades

The Bay of Plenty Regional Council is responsible for the management of a network of over 500 km of farm drains and canals for the purposes of providing land drainage and flood protection to an area of 8,000 km^2. There are many more hundreds of kilometres of privately managed farm drains. The Kaituna Scheme has 99 km of drains under management. Some drains currently have poor (or no) riparian fencing, with little vegetated fence setbacks and no shade. A combined effort to move towards implementing more 'best practice drain management' is now required between landowners and Council, across scheme and non-scheme areas. Lowland drains typically have some of the poorest water quality in the region, with extremely elevated levels of nitrogen, phosphorus, fine sediment and bacteria, extreme levels of dissolved oxygen (both high and low), elevated temperatures, and poor in-stream habitat. Contaminant reductions required in the Maketū Estuary to reach a moderately healthy ecological state for example are in the order of 63% for nitrogen, 38% for phosphorus and 60% for *E. coli* bacteria. A report is available summarising Kaituna drain water quality in full detail following a 17 month survey. Despite the relatively small size of drains, they contribute significantly to catchment loads in receiving environments given the intimate connection between the drainage network and high intensity land uses.

Initial drain upgrade progress has been made through the Councils Land Management Focus Catchments Programme, whereby Council has collaborated with around a dozen landowners through Environmental Programmes to co-fund drain upgrade work in the Kaituna. Any planting works in scheme areas require bylaw approval from the Council, but generally, good solutions exist to allow some form of enhancement work to occur safely and ensure the scheme can operate effectively. As well as supporting bylaw applications for keen landowners, the Council Rivers and Drainage team have also been involved in trial work to upgrade reaches of scheme drains. However, with no dedicated budget and works having to be funded at the cost of other scheme maintenance activities, opportunities are currently very limited.

It would be prudent for the Advisory Group and landowners to consider the longer-term options for implementing such work on a larger scale, through for example, cost share arrangements between landowners and the Council. The Council Long Term Planning process could also be utilised to seek additional support for focusing on the environmental aspects of scheme and private drains.

Monitoring of best practice drains upgrades

Although the benefits of best practice drain upgrades have been outlined in technical guidance from DairyNZ and good assumptions can be made, very little monitoring data exists for measuring the actual effectiveness of works in the Bay of Plenty context. To help bridge the data gap, a new partnership project is currently underway on the Te Arawa Lakes Trust fairy farm in Maketū to monitor the changes that occur when best practice upgrades are implemented.

This experiment will see a range of key water quality parameters monitored across a series of drains, some of which will be upgraded (treatment drains), while others will be left in their current state (control drains), thereby providing a real-time comparison of effectiveness. Measured parameters will include nutrients (nitrogen, phosphorus), sediment, water temperature, dissolved oxygen, invertebrates and fish. A year of baseline monitoring data was collected before any works commenced, and the treatment drains are currently being upgraded. Several years of monitoring will be needed before any firm conclusions can be drawn, but the data will likely support the case for expanding environmental works across drainage networks and help ensure the recognition and credit can be gained for efforts. Similar work is also underway monitoring the effectiveness of constructed treatment wetlands in lowland drainage areas, with three wetlands now under construction.

Figure 3. *Drains on the Te Arawa Lakes Trust farm involved in the intensive monitoring programme. A constructed treatment wetland is also being built on the property this month.*

Costs for drain upgrade work

Costs to implement the upgrades are highly variable depending on things like the volume of earthworks required in the re-battering, whether cut material has to be carted to a different site for spreading, number and type of trees used in the buffer, and number of wires used on the fencing.

Our trial work to date suggests that costs to upgrade a kilometre of drain to the standard can be as high as $35,000/per km of completed works (cost includes earthworks @ $10/m; fencing @ $10/m; planting & releasing @ $15/m). Native planted drain banks will also require longer-term ongoing maintenance for things like pest plant control if issues arise with pampus, gorse, blackberry, privet etc, representing an additional expense that could be in the range of up to $500 per km per year.

Overall, this is a significant expense and daunting considering the length of drains in catchments. Fortunately, opportunities exist to bring the cost down through things like landowners completing the labour components themselves, reusing existing fence materials, using fewer or smaller grade native plants etc., plus there could be longer-term savings made through reduced drain cleaning costs and potentially greenhouse gas offsetting once a pricing scheme is established by the government. At present, there is no allowance to compensate landowners for land retired under new drain management work.

With around 100 km of managed drains in the Kaituna Scheme, efforts of 10 km of drain per year would see completion within 10 years at a cost of around $350,000 per year based on recent cost examples (less with cost-share or co-funding arrangements). Many more kilometres of private drain would also require some action where possible.

Figure 4: *Example of a recently upgraded private farm drain in the Kaituna (Ford Road Focus Catchment).*

Farm race alignment near drains

Many farm races are located in very close proximity to drains, often with little or no buffer to intercept runoff and with a camber leading directly towards drains. This represents a further water quality risk and could be viewed as a critical source area for direct waterway contamination. Considering the re-alignment of races away from drains, adding grass buffers between races and drains, or re-cambering off to other locations, is one way to reduce the run-off risk, but potentially a very costly capital expense for farms. Such re-alignments could be considered in small stages as race maintenance occurs, and prioritised based on the highest risk areas such as near dairy sheds and feed pads where animals congregate.

Water policy update and alignment with drain management

BOPRC is working to implement government's new policy direction and will notify changes to both the Regional Policy Statement and the Regional Natural Resources Plan in 2024 (**Figure 5**). During 2021, this Essential Freshwater Policy Programme of work had a strong focus on delivering science and technical information that will underpin the plan making process, and on building relationships and engagement with iwi and hapū. Council also progressed some initial review of existing freshwater and land use chapters of the RPS and RNRP. This year, the major focus will be developing draft measurable targets, limits and policy options to achieve them, and working with iwi and hapū to involve them in this process and support their Mātauranga Māori input. Giving effect to the concept of Te Mana o te Wai will be important, this means policy makers must put the life-supporting capacity of freshwater as the highest priority in their considerations, above the needs of people and economy etc. Throughout this year, we will start to build and provide information for the public, hold online engagement on vision and outcomes, and aim to develop community readiness to engage on policy options that affect them in 2023. Further information on the Essential Freshwater Policy Programme is available here (https://www.boprc.govt.nz/our-projects/essential-freshwater). Follow items going to Regional Council's Strategy and Policy Committee for decision by checking their agenda reports (https://www.boprc.govt.nz/your-council/council-and-region/committees/strategy-and-policy-committee).

Under new RMA regulations, all farms over 20 ha will be expected to have a certified Freshwater-Farm Plan by 2025. Although it is too early to be certain, lowland farms within drainage networks could realistically expect that some form of 'best practice drain management' is likely to be required in the future, either through a specific Regional Plan rule or as a priority Freshwater-Farm Plan action, as one mitigation to help address water quality issues. Risk assessment and critical source area mitigation are key aspects of the farm planning approach, so drains cannot be overlooked in the process. Furthermore, future consenting of scheme activities such as pump station upgrades and drain maintenance work may benefit considerably from a commitment to best practice drain management. Final Freshwater-Farm Plan regulations are due around mid-2022, and Council has recommended that Government consider putting Kaituna/Maketū and Waihī Estuary farms in an earlier trance of the roll-out (before 2024) due to the water quality issues in the catchment.

In terms of new national RMA stock exclusion regulations, these only apply to '>1m wide rivers' (as defined in the RMA). This means the regulations apply to continually or intermittently flowing bodies of freshwater; including streams and modified watercourses; but does not include any artificial watercourses such as a farm drainage canals. For this reason, the stock exclusion regulations are unlikely to impact on the scheme drains (unless specific reaches are classified as streams/modified watercourses under the RMA). However, Freshwater-Farm Plan regulations could still require more property-specific stock exclusion obligations, including on drains.

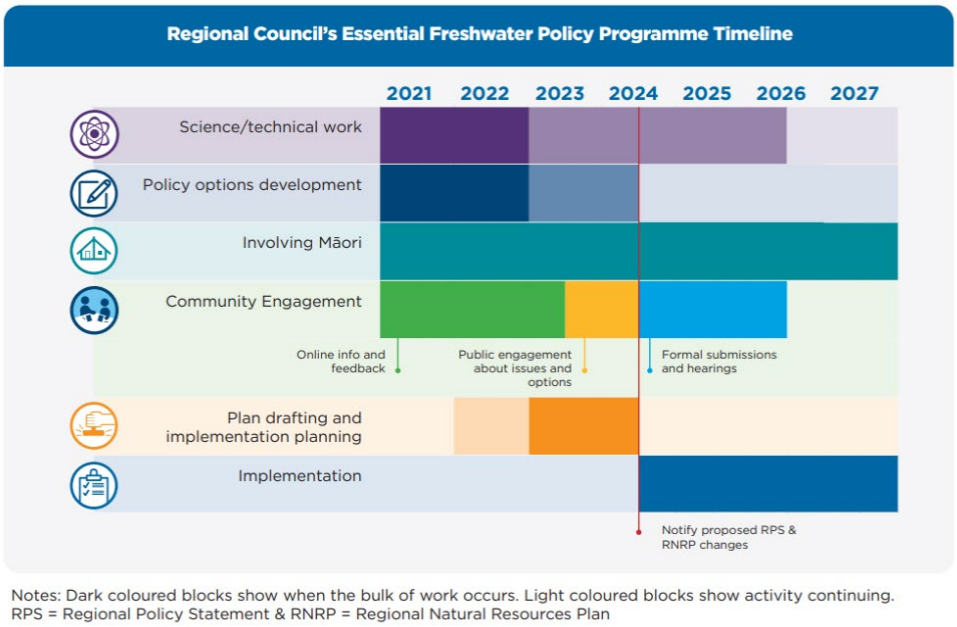


Figure 5: *Essential Freshwater Policy Programme Timeline. Advisory Group members should ensure they participate in the consultation process in mid- 2023 onwards.*

Te Maru o Kaituna River Authority

It should be noted that Te Maru o Kaituna River Authority has adopted an action plan "Te Tini a Tuna" which includes a focus on improving drain management, drain water quality, and habitat values. While non-statutory, the action plan is accompanied by a change to the Regional Policy Statement (Change 5) which is set to be heard in due course following a recent consultation and submissions process.

Recommendations:

- All lowland farmers should become familiar with the best practice drain management guidelines and consider how and where on their properties they could incrementally move towards implementing guidelines in a practical way. Some support for works is currently available through the Councils land management Focus Catchments programme and Rivers and Drainage teams. It is likely that better drain management will be a key action in Freshwater-Farm Plans which will be required for all farms by 2025 under new RMA rules.

- Local experiences from on-the-ground drain management could be used to develop new Bay of Plenty /Kaituna Scheme specific advice on exactly what 'best practice' looks like for the area.

- A robust business case could be prepared for the next Long Term Planning process to seek additional Council support to build the programme of best practice drain management work over the next 10 years and beyond. Other co-funding opportunities may also be available, and farm greenhouse gas pricing schemes that consider riparian vegetation strips will also be helpful to gain credit for efforts, alongside the water quality benefits.

- Where possible the Advisory Group and community should commit to demonstrating early adoption of the best practice guidelines on all scheme drains as a minimum, to show a commitment towards water quality improvements and help encourage others with private drains to have the confidence to adopt works. With nearly 100 km of managed drains in the Kaituna scheme, efforts of 10 km of drain per year will see completion within 10 years at a cost of around $350,000 per year based on recent cost examples (less with cost-share/ co-funding arrangements).

MEMORANDUM

BAY OF PLENTY REGIONAL COUNCIL TOI MOANA

To: Kaituna Catchment Control Scheme Advisory Group

From: Kirsty Brown **Date:** 16 March 2022

Rivers and Drainage Assets Manager

File Ref: A4058829

Subject: **Findings from an online survey and Advisory Group's Terms of Reference Review**

The purpose of this memo is to provide advisory group members with summarised findings from the recent online survey and to seek feedback on the proposed enhancements to the groups' Terms of Reference (TOR).

1.1 Online Survey Findings

Members feedback regarding the advisory groups was recently sought via an online survey.

18 of the 34 members across all four advisory groups completed the survey, a 53% response rate. 5 out of the 7 members completed the survey for this advisory group.

Across all advisory groups, the summarised findings are as follows:

- 72% strongly agree that the advisory groups are working well.
- 67% strongly agree they are happy with the information received (via email) outside of meetings but to extend the information so that it is accessible to the wider community.
- There is a perceived disconnect between the river authority and the advisory group and a strong desire to improve and increase the flow of information between the two groups.
- About 66% agreed with the statement that mana whenua should be welcomed on the Rivers Scheme Advisory Groups.
- Comments were received regarding having to take time off work to attend meetings. Currently, members are volunteers without compensation.

For more information regarding the survey findings, see Appendix 1.

1.2 Terms of Reference (TOR) Review

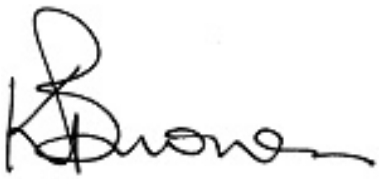
The primary purpose of our river scheme advisory groups is to provide for scheme ratepayer input into decisions around annual maintenance operations, scheme rating, capital programme delivery, and management of scheme assets.

Council adopted the current advisory group terms of reference in December 2016, following an extensive review and consultation process with stakeholders including the previous liaison group members. At its meeting held 30 September 2021, Council endorsed commencing a review of the 2016 TOR for the four-river scheme advisory groups. A working group consisting of Councillors Nees, Bruning, MacDonald, Clark, and Iti was established to support the review.

The purpose of the review is to:

- Confirm the purpose of the advisory groups remains appropriate in 2022.
- Consider how the groups might assist in achieving our Long Term Plan strategic impact areas: Partnerships with Māori, Climate Change and Community Participation.
- Address any other concerns from members on how the meetings currently work.

Advisory group members will be kept informed with the review's progress.



Kirsty Brown
Rivers and Drainage Assets Manager

Appendix 1

Rivers Scheme Advisory Groups Online Survey Findings

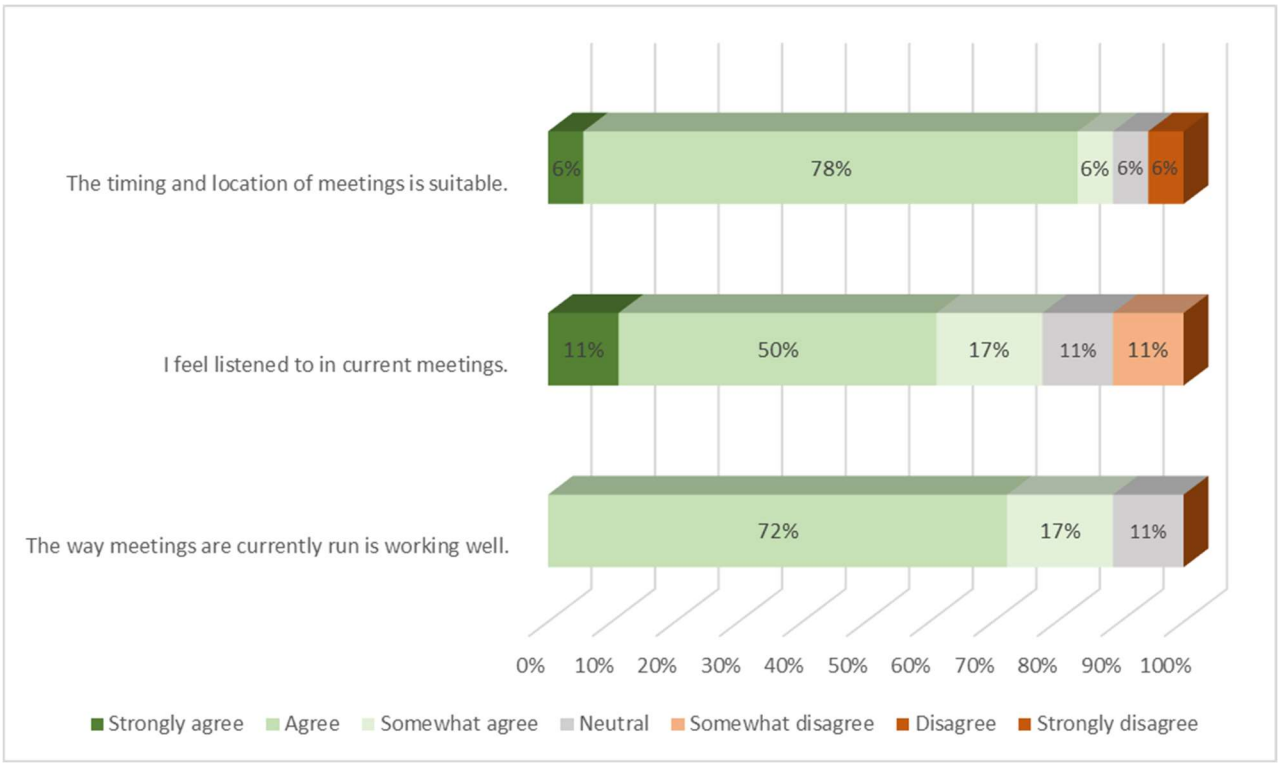
December 2021

Findings

An online survey was distributed to all River Advisory Group members, with the overall response rate of 53% (18/34 current members). Some questions were asked about the current (2016) Terms of Reference for the purpose of feeding into a review of these. Findings are presented below.

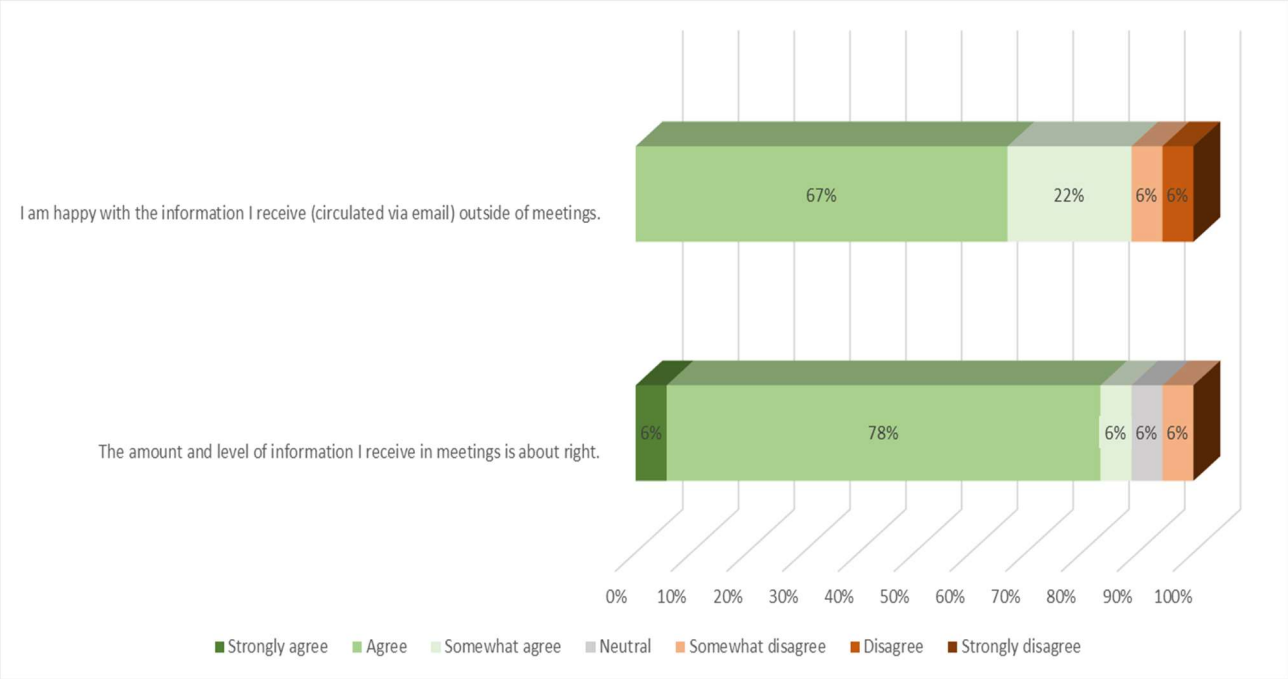
Satisfaction with meetings

The first three questions asked about the way meetings are currently run. Generally they were seen as "working well" (72% agree), the timing and locations was suitable (84% strongly agree or agree), and members felt listened to (61% strongly agree or agree). Other feedback was varied. Respondents highlighted that plenty of advance notice is given, there are respectful discussions even when views differ, good chairs and facilitation of group. Concerns were expressed about the time taken away from employment to attend and whether their input was making a difference.



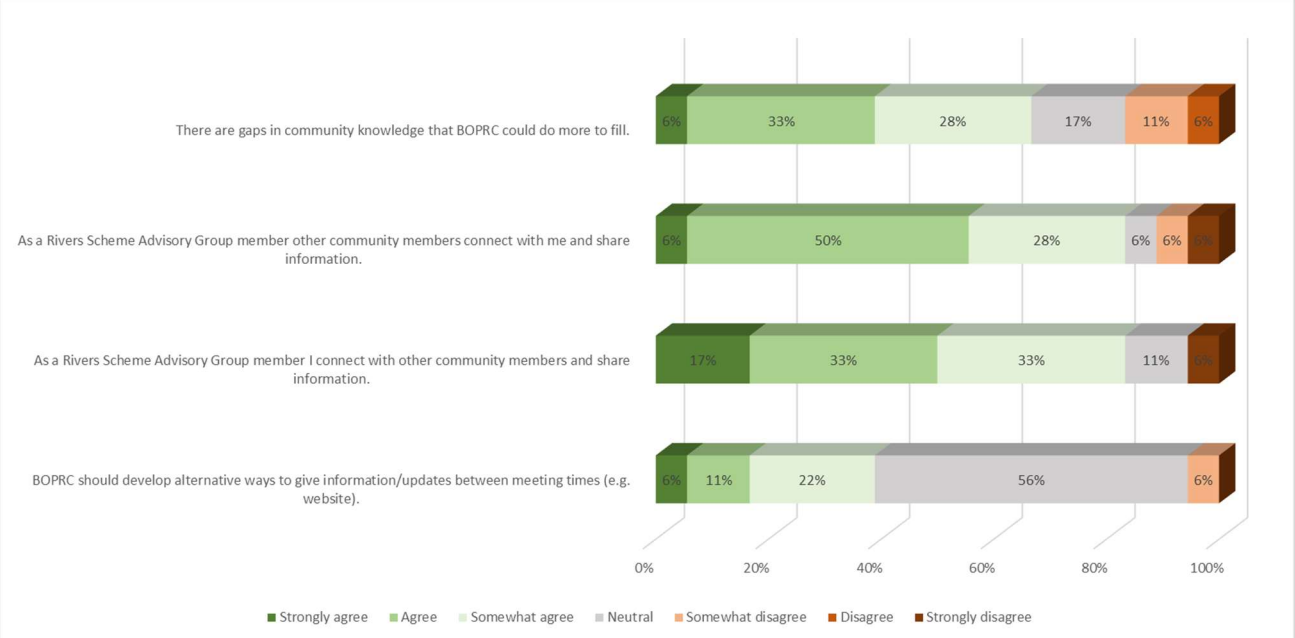
Information received

The next questions asked members to consider information flow. 67% strongly agreed that they were “happy with the information received (circulated via email) outside of meetings”. Additionally 84%, agreed that the amount and level of information received in meetings is “about right”.



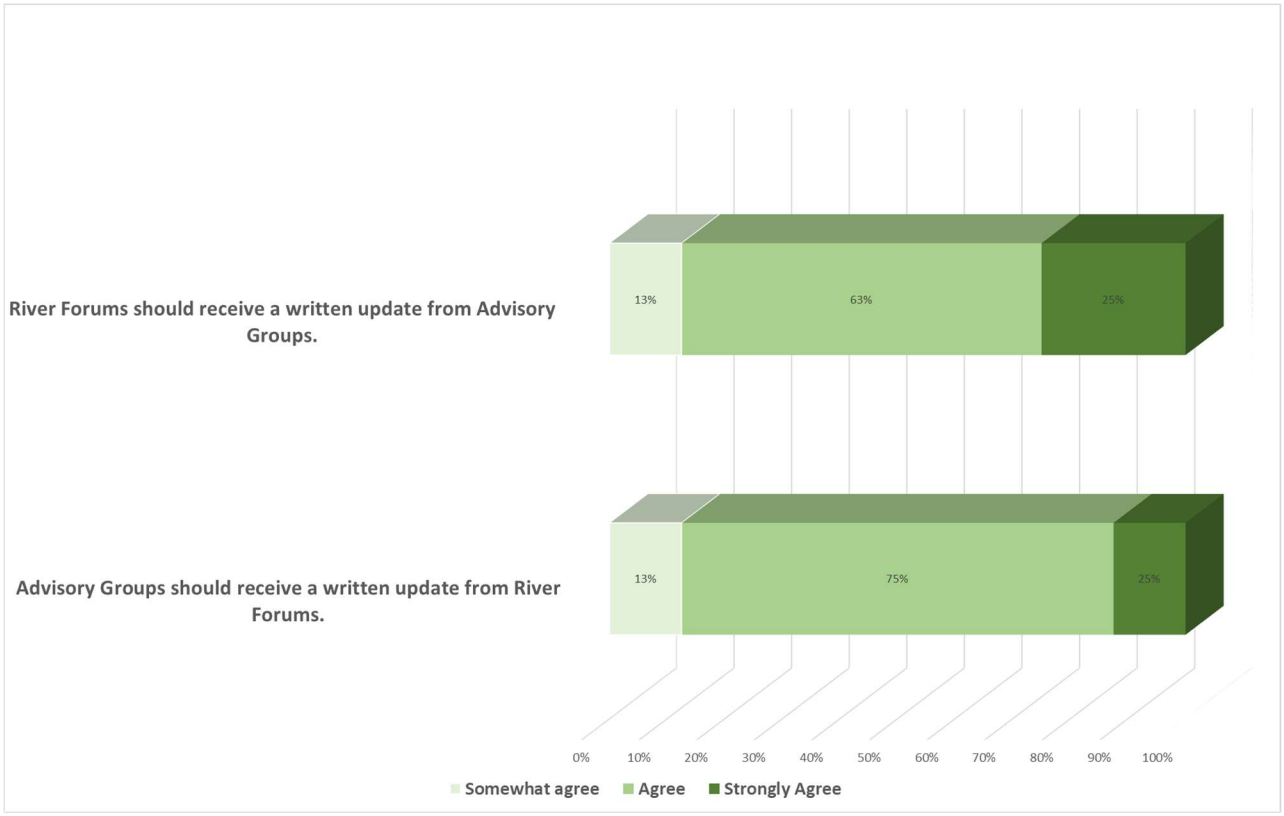
Information sharing

The next set of questions asked about sharing information. The responses showed sharing information is a key role of the River Advisory Group work and that there is an appetite for further extending the ways information is given out between meeting times, so that it is perhaps accessible to the wider community. While comments included affirmation of the sharing Bay of Plenty Regional Council currently does, other ideas included a website, a mail out of information, in order to allow wider understanding of the Schemes.

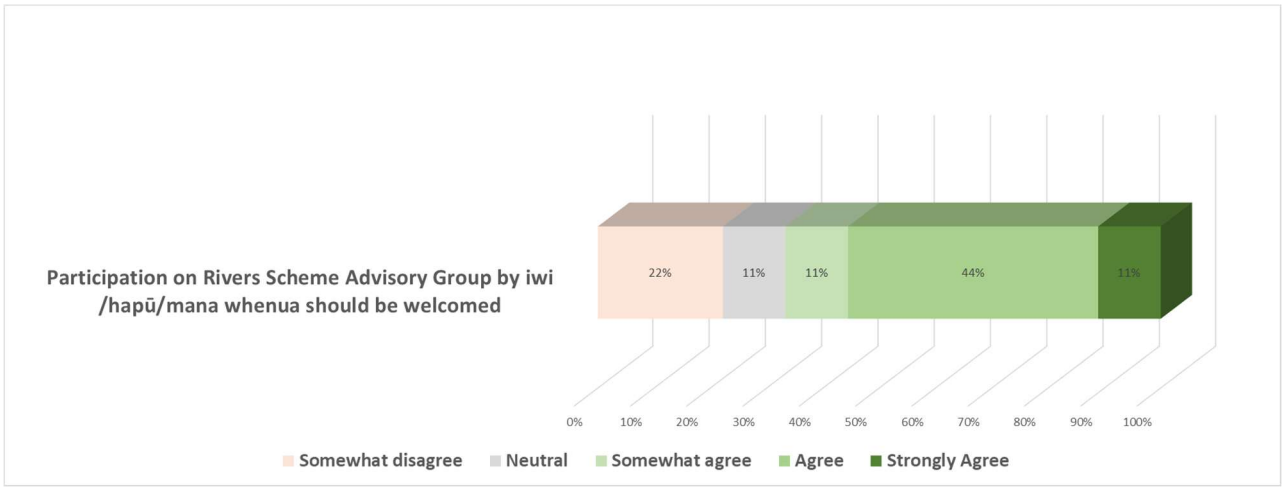


Engagement with River Forums

Kaituna Catchment Control and Rangitāiki-Tarawera Rivers Scheme Advisory Group members were asked specific questions about their engagement with the River Forums. They indicated a desire to improve and increase flow of information. 100% either somewhat agree/agree or strongly agree that Bay of Plenty Regional Council should ensure written updates are shared back and forth between the entities (see graph below).



Additionally, 66% agree (somewhat agree/agree or strongly agree) with the statement “participation on Rivers Scheme Advisory Groups by mana whenua should be welcomed”.



MEMORANDUM

BAY OF PLENTY REGIONAL COUNCIL TOI MOANA

To: Kaituna Catchment Control Scheme Advisory Group

From: Kirsty Brown **Date:** 23 February 2022

Rivers and Drainage Assets Manager

File Ref:

Subject: **General Business Update**

1. Outcomes of the Infrastructure Insurance Review

Findings from the recent flood risk assessment, undertaken by Aon and Tonkin & Taylor Ltd, was provided to group members via email on 12 November 2021.

In summary:

- Council's current infrastructure insurance premium of approximately $0.8M is currently the most cost-effective risk financing for flood losses.
- The actual 2021/22 premium was $734.877. The proportion for the Kaituna Catchment Control Scheme was $143,301 (split between the schemes by asset value).
- The current premium also provides cover for other natural hazard events (earthquake, tsunami, tornado, volcanic eruption).
- To self-insure, the modelling determined the minimum amount to self-insure for flood risk would be $1M per year, but a more prudent reserve contribution would be $1.5M per year.
- Based on this information the conclusion is to remain with the status quo, i.e. with professional insurers.

Careful monitoring and ongoing analysis of Council's asset risk, central government policies and local government reforms is required and will be ongoing to ensure professional insurance remains the most effective option. Updates to advisory group members on infrastructure insurance cover will continue.

2. Review of the April 2017 Flood Repair Project

Christensen Consulting has been engaged by Council to review the programme of flood repair work completed following the April 2017 flood event.

A thorough review was which included meetings with elected representatives and Council staff, stakeholders, and the review of more than 25 reports and documents relevant to the project.

A draft report has now been received with the following key findings and recommendations:

- The project management processes, reporting and communication was found to be very thorough and was fundamental in the recovery of costs from insurers and Central Government funding sources.

- More involvement from wider stakeholders and technical disciplines including ecologists could have resulted in more consideration of mitigation requirements and different approaches being taken.

- The specifically mandated requirements for working with iwi partners in freshwater and river management has evolved significantly in recent years especially through Te Mana o Te Wai and if a project of the scale was being undertaken today iwi would have much greater role in all aspects of the project.

- There is a greater appreciation and understanding of the tools available for providing more room for the river and using Natural and Nature Based Flood Risk Management solutions for achieving effective and sustainable river management solutions.

- These solutions including levels of service and clear guidelines on triggers and scales of intervention need to be agreed with iwi partners, landowners and wider stakeholders. This information would fit within the scope of the Rivers and Drainage Asset Management Plan, and it is recommended that this is updated to include specific details on the space the river can occupy and the levels of service for managing the position of river banks.

3. Kaituna Rating Review

Simon Harris from Land Water People Ltd has been undertaking a review on the Kaituna Catchment Control Scheme's rating system, to provide information on the appropriateness of the current rating system and to support small scales changes.

A meeting was held in August 2021 to share Simon's methodology and findings, and to give members an opportunity to provide feedback directly to Simon and staff. This resulted in additional work particularly on the changes in impermeable surfaces in Te Puke for the period 2001 to 2021. The Te Puke modelling has now been completed with the optioneering stage now underway.

After discussion between the consultant and staff, the following recommendations are made:

- Remove the Te Puke portion of the review until the optioneering process has been completed. This would enable accurate information to support modifications to the rating classification for this area.

- Formalise PWL's recommended minor changes modifications to the rating classification changes to meet 2022/23 Annual Plan timelines. In summary, the recommended changes are:

- Bell Road/Papamoa: The site ratio in the B5 area should be increased to allow for the increased benefit associated with its reliance on the Bell Road drainage scheme.
- Ngongotaha: Reclassify areas protected by engineering works in the upper Ngongotaha.
- Utuhina: Adjust the boundary to incorporate the Pukehangi Heights subdivision consented area.
- Rotorua streams: Reclassify land adjacent to the Ngongotaha, Utuhina, and Puarenga to provide for funding of stream maintenance and flood mitigation benefits.

4. 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 project has an urban focus.

Staff are currently working with 3 property owners on the Waingaehe Floodway to relocate encroaching fences onto legal boundaries. This will enable the removal of large trees growing on the fence line and improved maintenance of the floodway berm.

Kirsty Brown
Rivers and Drainage Assets Manager