



Kaituna Catchment Control Scheme Advisory Group Meeting

**Wednesday 31 August 2022
10:00am**

Settlers Lounge
Te Puke War Memorial Hall
130 Jellico Street
Te Puke

Kaituna Catchment Control Scheme Advisory Group Meeting

Wednesday 31 August at 10am

Agenda

- 1 **Welcome**
- 2 **Apologies**
- 3 **Notes of previous meeting held 4 April 2022**
- 4 **Matters arising from previous meeting**
- 5 **Scheme annual report 2021-2022**
- 6 **Capital work programme**
- 7 **Maintenance work programme**
- 8 **Te Maru o Kaituna River Authority**
- 9 **Asset management planning**
- 10 **General business**
- 11 **Public forum**
- 12 **Meeting closure**

Notes of the Kaituna Catchment Control Scheme Advisory Group meeting held at Rotorua BOPRC Office, Waiariki Room on Monday, 4 April 2022, commencing at 10am

Chair:	Councillor Norm Bruning
Advisory Group:	Barry Roderick, Graham Thompson, Heather Brake, Nick Chater, Richard Weld, Councillor John Scrimgeour (WBOPDC) and Peter Dine (RLC)
BOPRC Councillors:	Councillor Jane Nees
BOPRC Staff:	Chris Ingle (General Manager Integrated Catchments), Kirsty Brown (Rivers and Drainage Assets Manager), Annalees Craig (Acting Asset Management Coordinator), Bruce Crabbe (Rivers and Drainage Operations Manager), Mark Townsend (Engineering Manager), Andy Dixon (Treasury and Tax Specialist), Sam Whittle (Communications Partner), Russell Knutson (Team Leader Western Catchments)
Public:	Nathan York (Blue Haven)
Apologies:	Councillor Matemoana McDonald, Dean Favell (Te Maru o Kaituna), Roger Hintz, Dave Hurst, Kerry Smith (Area Engineer Kaituna), Jackson Efford (Principal Advisor, Land and Water)

1 Welcome

Councillor Bruning opened the meeting.

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 28 September 2021

The Kaituna Catchment Control Scheme Advisory Group confirmed that the notes of the previous meeting held 28 September 2021 as a true and correct record.

**Weld/Roderick
CARRIED**

4 Matters arising from previous meeting

- For general business – Kaituna River mouth bar (Barry Roderick).
- TCC's Ponds G and H update. Mark Townsend advised that an independent review for Pond G has been completed which produced several concerns. These have been raised with Council's Compliance Team who are seeking information from TCC.

5 Engineering update

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

Key updates:

Ford Road Pump Station

- The detailed design for replacement of the Ford Road Pump Station considers both axial flow pumps and archimedes screw as potential solutions. Council is progressing the consent application based on these two designs.
- Consultation ongoing with landowners, Iwi, Department of Conservation (DOC) and Fish and Game.
- Awaiting the cultural impact assessment from Tapuika.
- An archaeological assessment has been completed and application for Archaeological Authority is being prepared.
- Council is proposing to push works out a year if a consent hearing is required.

Te Puke Stormwater Project

- A modelling assessment on Te Puke development impacts since 1999 has been completed. Modelling showed that flood levels have increased due to development which has an effect on volumes. It also showed that installation of the Armer and Marshall pumps has been beneficial.
- Western Bay of Plenty District Council is currently undertaking the climate change modelling. Optioneering will follow.

Utuhina Stream Modelling

- Currently unable to find a solution due to the geothermal activity and lack of room.
- Discussing long term retreat with Rotorua Lakes Council (RLC). The Regional Council will be providing support to RLC as they lead this process.

Kaituna Mole refurbishment

- A video of the Kaituna mole was shown.
- Construction works now complete. From the remaining budget (approximately \$500,000), \$250,000 has been offered to WBOPDC towards a carpark and new toilet block.

Ngongotahā Stream Mitigation

- Peer review completed by Christensen Consulting Ltd.
- Separate consent is now required for hi-flow paths.
- Agreement has now been received from all affected landowners except one.
- Upper catchment works continue with the removal of problematic trees and the construction of detainment dams.

Questions/Discussion:

- Members queried whether the price of the Ford Road pump station replacement would increase if delayed. Mark Townsend commented that they are presuming prices will increase if this is the case.
- Barry Roderick questioned whether the re-diversion has affected the sand bar at the river mouth for boats. Russell Knutson commented that this was due to dry weather conditions and river low flows. A decent rain event should shift the sand.

6 Operations update

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

Key points:

- Covid-19 has caused delays with equipment and material shortages.
- Desilting of Factory Drain downstream of Pukepine has been completed, noting material had to be removed.
- Installation of pump drain culvert and screen installation on Singletons Drain. Fencing to be set back and planting to come.
- Maketū Estuary stopbank rock replenishment work has been completed.
- Works completed on the Managakahi Stream to open the floodway and remove pest plants. This work was done in conjunction with RLC Parks/Reserves.
- Rock has been installed on Waitetī Stream to replace a delapidated retaining wall.
- Landowner encroachments on the Waingaehe Floodway have been resolved with fences moved back to legal boundaries, resulting in just over 5,700m² floodway land recovered.

Questions/Discussion:

- It was questioned who was paying for the removal of the desilted material from Factory Drain. Bruce responded that this was a cost to the scheme.
- Peter Dine queried what work that has been planned for the Ōhau Channel. Bruce responded that it was erosion repair job by the highway.

7 BOPRC Collecting Rates

Kirsty Brown and Andy Dixon spoke to the agenda report and provided a presentation.

Key points:

- From August 2022 the BOPRC will start collecting its own rates. Priority reason for the change is to become more transparent and accountable for the work that BOPRC does.
- It has been estimated that there will be a saving of \$6 million over 10 years by moving to self-collection.
- This will also enable Council to control remission and postponements available to ratepayers, penalty schedules and payments plans/direct debits to spread payments.

Questions/Discussion:

- It was questioned whether there will be an extra charge if payments are made throughout the year. Andy Dixon advised there will be no extra charges if a payment plan is in place.
- Councillor Nees advised that consultation is currently underway on the rates remission process. Submissions close on Wednesday, 4 May 2022. Details can be found on the BOPRC website.

8 Finance Report

Kirsty Brown spoke to the finance report and provided an overview of the scheme's revenue and expenditure for the six months ending 31 December 2021.

Key points:

- External interest income \$39,000 lower than budget.
- Total revenue \$53,000 lower than budget.
- Contract work was \$102,000 lower than budget but expected to be close by year end.
- Total operating deficit of \$76,000.
- Capital revenue was \$171,000 higher than budget, but total capital expenditure was \$1,170 million lower than budget.
- Total reserves funds available at 31 December 2021 \$5.3 million.
- The loans closing balance was \$7.8 million.
- The scheme's asset valuation is \$77 million.

Questions/Discussion:

- Barry Roderick queried why capital expenditure was so much lower than budget. Kirsty advised that this was due to the main construction season commencing after the Christmas period.

9 Co-governance and Community Group Updates

Kirsty Brown spoke to the Te Maru o Kaituna (TMoK) River Authority report and Nick Chater offered to provide answers to any questions.

It was noted that the purpose of this report is to improve the connection and communication lines between the river authority and the advisory group. Nick Chater commented that visitors are welcomed at the TMoK meetings which meet four times a year. Councillor Bruning requested TMoK meetings dates be circulated.

ACTIONS:

Circulate to TMoK river authority members a report from the 4th April 2022 Kaituna Catchment Control Scheme river advisory group meeting.

Circulate to advisory group members the upcoming Te Maru o Kaituna (TMoK) River Authority meeting dates.

Russell Knutson advised that Council is keen to work with landowners who have an interest in collaborating to improve water quality in the river scheme, particularly when the scheme overlaps with one of the focus catchments.

10 Best Practice Drain Management

Staff spoke to the best practice drain management report.

Key points:

- Dairy NZ has best practice standards for lowland drain management that can be followed.
- Under new RMA regulations, all farms over 20 hectares will be expected to have a certified Freshwater-Farm Plan by 2025. Currently the BOPRC can provide financial assistance to support upgrades to private drains, noting this funding will not be available once regulations are formalised. Outside the focus catchments the maximum BOPRC can contribute is 25%.
- To assist in data collection, a new partnership project is underway on the Te Arawa Lakes Trust dairy farm in Maketū to monitor the changes when best practice upgrades are implemented.
- It was noted that Te Maru o Kaituna has adopted an action plan “Te Tini a Tuna” which includes a focus on improving drain management and water quality.

Questions/Discussion:

- Russell Knutson commented that BOPRC is very appreciative of farmers and particularly Te Arawa Lakes Trust farm who are taking up this opportunity. Russell also mentioned that BOPRC is planning a field day in May on the Te Arawa farm for further conversations. Details surrounding this day will be sent out to members.

ACTION:

Circulate to advisory group members information about the Te Arawa Lakes Trust (TALT) field day.

- Barry Roderick questioned what percentage of nitrogen would be reduced with the work going into drain upgrades. He commented that farmers need to know that there are good results through the work being done. Russell commented that the science is not perfect that is why the upgrades on the Te Arawa Lakes Trust Farm will be monitored.
- It was then questioned whether results from other similar situations were available. Russell responded there wasn't at present, commenting that this is because the concept is relatively new. Members noted that they had concerns that farmers will get forced into making these changes only to find it doesn't really work.
- Members also had queries around what constitutes a drain. It was advised anything bringing water into the main drains managed by BOPRC is constituted as a drain.
- Barry Roderick questioned maintenance costs during the planting's lifespan. Russell Knutson commented that landowners take on the cost of maintenance once planted.

11 Online Survey Feedback and Current Terms of Reference Review

Kirsty Brown spoke to the agenda report and provided a presentation.

Key points:

- Improvements are being made based on survey results including:
 - Information sharing e.g website notifications.
 - Improving the connection between TMoK and the advisory group.
 - Addressing other concerns e.g., barriers to meeting attendance.
- A Council endorsed review of the advisory groups Terms of Reference (TOR) is underway. The purpose of the review is to ensure the groups remain appropriate and to consider how they might assist with achieving LTP strategic impacts areas of Partnership with Māori, Climate Change and Community Participation.
- A draft TOR will be circulated to advisory group members for comment.

12 General Business Report

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

12.1 Infrastructure insurance review

The recent flood risk assessment undertaken by Aon and Tonkin & Taylor Ltd has determined that currently the best option is to remain with market insurance. Careful monitoring and analysis of the infrastructure insurance cover by staff will be ongoing.

12.2 Review of the April 2017 flood repair project

Christen Consulting has undertaken an in-depth review of the programme of flood repair work completed following the April 2017 flood event.

The final report highlighted that the project management process was done very well which is evident by the claim funding received from insurance and central government.

For future flood events, the report highlights that more involvement from wider stakeholders and technical disciplines will be required, specifically the mandated obligations to work with iwi partners.

ACTION:

Circulate a copy of the Christensen Consulting Ltd final report on the April 2017 Flood Repair Project.

12.3 Update on Kaituna Rating Review

- Formalise LWP's recommended minor modifications to the reviewed rating classifications to meet 2022/23 Annual Plan timelines.

12.4 Update on Safeguarding our Stopbank project

Staff have been working with three property owners on the Waingaehe Floodway to restore landowners' encroachments back to the legal boundary (as discussed in the Operations update).

13 Public Forum

No items raised.

Meeting closed at 12:25 pm

Action Sheet

Kaituna Catchment Control Scheme Advisory Group Meeting

4 April 2022

Action	Person Responsible	Completed	Comment
1. Circulate to advisory group members the upcoming Te Maru o Kaituna River Authority meeting dates.	Annalees Craig	✓	Circulated 05/04/22 refer A4075643
2. Circulate to members a copy of the Christensen Consulting Ltd final report on the April 2017 Flood Repair project.	Annalees Craig	✓	Circulated 05/04/22 refer A4075643
3. Circulate to Te Maru o Kaituna River Authority members a report from the 4 April 2022 Kaituna Catchment Control Scheme advisory group meeting.	Kirsty Brown	✓	Report provided to 20 May 2022 Te Maru o Kaituna River Authority meeting refer A4161835
4. Circulate to advisory group members information about the Te Arawa Lakes Trust field day.	Russell Knutson/Annalees Craig	✓	Circulated 12/05/22 refer A4097813

Kaituna Catchment Control Scheme

Annual Report 2021-2022

The purpose of this report is to provide an overview of the Kaituna Catchment Control Scheme operational and capital works programmes and finances for 2021-2022.

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, considering asset lifecycle, maintenance, and inspection schedules.

The 2021-2022 Kaituna maintenance programme was delivered to programme and slightly over budget (a summary of the programme is attached).

Programme highlights
Maketū Estuary foreshore stopbank - replenished approximately 500 lineal metres of rockworks and carried out adjacent toe-drain seepage repairs.
Ohineangaanga Canal - removed accumulated sediments from right berm and used to toe-load the landward side of the stopbank.
Te Puke catchments drainage and pumping – very wet period through June and July caused significant stormwater ponding on low-lying properties. Extraordinary mobile pumping was implemented at Armer’s and Marshall’s pump stations to supplement the existing pump stations.
Waitetī Stream – carried out edge protection works involving removal of 55 metres of failing steel sheet pile retaining wall and replacing with rock armour. This was a tricky urban project with additional tree removal and challenging access conditions.
Waingaehe Floodway - multiple works including vegetation removal, stopbank reshaping, fencing to limit motorbike access, and realignment of 700 lineal metres of fencing that encroached onto Council property.

Capital work programme

Several of the larger capital works projects were significantly underspent due to planning and construction components being deferred to 2022-2023, and in some cases 2023-2024. The reasons for programme slippage vary across the projects, with some slippage provided for through carry forward funding recommendations. Many of the projects are multiyear and multifaceted, and adjustments have been needed to allow for modelling results, overseas supply issues, additional consultation, and fitting in with other agencies timelines.

Project name	Budget vs Actual 2021-2022
<p>Kaituna Pump Station Electronic Upgrades</p> <p>The 2021-2022 work involved the Kopuaroa pump station electrical, switchboard and telemetry upgrade.</p> <p>Project status – Kopuaroa pump station upgrade work complete</p>	<p>Budget - \$97,280</p> <p>Actual - \$94,000</p>
<p>Ford Road Pump Station Upgrade</p> <p>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.</p> <p>Council has approved the option to provide additional pump capacity at the Diagonal Drain pump station located upstream of the Ford Road site.</p> <p>Regional Council have been advised that Rangiuru Business Park are likely to be seeking additional pumping capacity at Diagonal Drain pump station and are undertaking modelling to quantify this.</p> <p>Project status – on hold awaiting third party modelling results and subsequent confirmation of requirements moving forward.</p>	<p>Budget - \$800,000</p> <p><i>Revised budget - \$996,000 (including carry forward of \$196,000 from 2021-2022)</i></p> <p>Actual - \$229,000</p>
<p>Te Puke Stormwater</p> <p>Modelling work has quantified the extent that development in Te Puke is affecting the Kaituna Scheme.</p> <p>Project status – Stage 1 and 2 modelling work complete with modelling report approved by Regional and District councils. Option modelling is programmed in 2022-2023 and resulting mitigation works planned for 2023-2024</p>	<p>Budget - \$2,560,000</p> <p><i>Revised budget - \$133,000 (mitigation works deferred)</i></p> <p>Actual - \$18,000</p>
<p>Utuhina Stream Stopbanks</p> <p>The purpose of this project is to review the capacity of the existing stopbank infrastructure and design any mitigation needed to achieve, or maintain, the agreed level of service.</p> <p>Project status – capacity review complete with no identifiable mitigation other than managed retreat being found. Project lead has been passed on to Rotorua Lakes Council to include in their Rotorua for Tomorrow project.</p>	<p>Budget - \$645,120</p> <p><i>Revised budget - \$100,000 (mitigation works deferred)</i></p> <p>Actual - \$12,000</p>
<p>Kaituna Mole Upgrade</p> <p>Project involves the renewal and refurbishment of the existing Kaituna Mole control structure located at the mouth of the Kaituna River.</p> <p>Project status – construction work completed in December 2021 and the mole re-opened to the public. Western Bay of Plenty District Council to lead carpark development (including landscaping and toilets) in 2022-2023</p>	<p>Budget - \$577,536</p> <p><i>Revised budget - \$1,964,536 (including \$1,387,000 carried forward from 2020-2021)</i></p> <p>Actual - \$1,401,000</p>
<p>Ngongotahā Stream Flood Mitigation – Civil Works</p> <p>Project involves implementing the recommendations of the independent Ngongotahā Stream Review including:</p> <ul style="list-style-type: none"> • Raising Western Road (Rotorua Lakes Council) • Constructing new stopbanks alongside Brookdale and Streamdale roads • Constructing high flow bypasses on stream bends • Constructing a Southern bypass channel <p>Project status – major physical works deferred to 2022-2023 and 2023-2024</p>	<p>Budget – \$1,638,400</p> <p><i>Revised budget - \$2,018,400 (including \$380,000 carried forward from 2020-2021)</i></p> <p>Actual - \$32,000</p>

Financial overview 2021-2022

Attached is the Draft Statement of Revenue and Expense for the Kaituna River for the 12 months ended 30 June 2022. The loan and reserve balances were not available at the time this report was produced and will be tabled at the 31 August 2022 meeting.

Key points:

- **Operating revenue** was \$48,000 lower than budget, mainly due to lower than forecast interest rates
- **Operating expenditure** was \$337,000 higher than budget, mainly due to higher net overhead charges and recoveries (including additional staff time)
- This resulted in an **operating deficit** of \$385,000
- **Capital revenue** was \$1,623,000 lower than budget, due to CIP funding delays with the Kaituna Mole and Ngongotahā projects. Potential claim to be made in 2022-2023.
- **Capital expenditure** was \$3,706,000 lower than budget, with construction components of projects delayed and carry forwards into 2022-2023 proposed for several projects

Bay of Plenty Regional Council Toi Moana

Statement of Revenue and Expense - Kaituna Catchment Control Scheme (Draft until adopted by Council)

For the 12 months ended 30 June 2022

		Variance			2022/23
Revised Budget	Actual	\$	Variance indicator	Variance comments	Budget
\$000					\$000

Line Operating revenue by class

1	General rates	221	221	0	-		246
2	Targeted rates	2,102	2,102	0	-		2,387
3	External interest income	122	47	(75)	Lower	Lower than budgeted interest rates	5
4	Other revenue	30	57	27	Higher	DOC Kaituna Wetland (grant in lieu of rates) payment	32
5	Investment income	344	344	0	-		376
6	Total revenue	2,819	2,771	(48)	Lower		3,046

Operating expenditure by class

7	Administration expenses	6	28	(22)	Higher	Increased (equipment) insurance premiums	7
8	Other expenses	411	448	(37)	Higher	Additional infrastructure insurance (for assets) and materials costs offset by lower electricity charges	2,297
9	Contract work	696	737	(41)	Higher	Scheduled maintenance has been completed close to budget	728
10	Finance costs	209	121	88	Lower	Lower internal interest due to capital underspend	298
11	Depreciation and amortisation	361	368	(7)	Higher		418
12	Subtotal - expenditure	1,683	1,702	(19)	Higher		3,748
13	Net overhead charges and recoveries	887	1,205	(318)	Higher	Additional staff time	970
14	Total operating expenditure	2,570	2,907	(337)	Higher		4,718
15	Total operating surplus (deficit)	249	(136)	(385)			(1,672)

Bay of Plenty Regional Council Toi Moana

Statement of Revenue and Expense - Kaituna Catchment Control Scheme (Draft until adopted by Council)

For the 12 months ended 30 June 2022

		Variance			2022/23
Revised Budget	Actual	\$	Variance indicator	Variance comments	Budget
\$000					\$000

Capital revenue by class

17	Capital funding	3,129	1,506	(1,623)	Lower	CIP funding for Kaituna mole and Ngongotaha Civil works. Potential claim in 2022-2023 to come.	984
18	Total capital revenue	3,129	1,506	(1,623)	Lower		984
19	Total surplus (deficit)	3,378	1,370	(2,008)			(688)

Capital expenditure by project

20	Te Puke Stormwater project	133	18	(115)	Lower	Work to be undertaken in 2022-2023	0
21	Utuhina stream stopbanks	100	12	(88)	Lower	Project has been discontinued	0
22	Kaituna Flood Damage Repairs	0	(4)	4	Higher		0
23	Ngongotaha Stream Civil Works	2,018	32	(1,986)	Lower	Land owner approval outstanding (A&P Association). Construction work (bypasses and stopbanks) deemed to need resource consent. Main works have been pushed out to 2022-2023 construction season.	0
24	Kaituna pump station electronic upgrades	97	94	(3)	Lower		108
25	Upper Kaituna stopbank modelling	188	9	(179)	Lower		0
26	Ford Road Pump Station	996	229	(767)	Lower	Iwi and stakeholder engagement continuing. Proposed carry forward to 2022-2023	572
	Kaitna Pump Replacements	0	0	0			642
27	Kaituna Mole	1,965	1,401	(564)	Lower	Physical works on the upgrade reached practical completion in December 2021. Some minor works to be completed. Proposed carry forward of \$250,000 to 2022-2023	0
28	Total capital expenditure	5,497	1,791	3,706			1,322

Note: Reserve and loan information to be provided at 31 August 2022 meeting

Kaituna River Scheme: 2021-2022 Maintenance Works Programme - Status Report

Updated 11-08-2022

Objective ID: A434185

LOWER KAITUNA

Row	Reach	Work Type & Site	Annual Budget	Location	Estimate	Status
1	General					
2		Fly tipping and rubbish collection/disposal	\$8,500	Fly tipping	\$7,500	Ongoing
3				Erect signage	\$500	Completed
4		Pest Control	\$8,500	Pindone rabbit control	\$8,000	Ongoing
5						
6	Reach 1:					
7	Mouth to Te Matai (including Maketū Estuary)	Riverbank Weed spraying	\$6,600			
8		Gorse spraying		R/b 11.7-12.0 km	\$1,500	Completed
9		Blackberry spraying		R/b 12.0-12.6 km	\$1,000	Completed
10		Glyceria spraying various areas by boat.		Various L&R Banks	\$1,500	Deferred 22/23
11		Mulch gorse and spray Maketū Estuary		McKenzie's	\$1,500	Completed
12		Bamboo spraying 3.4 km			\$1,000	Completed
13						
14		Willow/Vegetation Maintenance	\$9,700			
15		Spray and regrowth		R/b 2.5 - 4.6 km	\$2,500	Deferred 22/23
16		Remove flax and replant		R/b 2.5 - 4.6 km	\$2,500	Deferred 22/23
17		Removing fallen and pest trees and vegetation		R/b 5.0- 6. km	\$5,000	Partial
18		Mulching		L/b 12.0-12.6 km	\$2,500	Deferred 22/23
19		Willow/Vegetation Maintenance- WBDC reserve		R/b 12.0 - 12.5 km	\$5,000	Deferred 22/23
20		Willow/Vegetation Maintenance		L/b 12.4-12.6 km	\$2,500	Deferred 22/23
21						
22		Planting	\$5,000			
23		RB Berm 3.2-4.2km various			\$2,500	
24		Wetland planting 3.3km			\$2,500	
25						
26		Rock replenishment	\$46,400			
27		Maketū Foreshore continued.			\$15,000	Completed
28		Brains drain.. Back fill to specs.. Not sure if this complete price			\$16,263	Completed
29						
30		Fencing Maintenance	\$4,500			
31		Fencing (tbc)		various	\$1,700	Completed
32		Maketū Pump Station			\$2,500	Deferred 22/23
33						
34		River & Estuary maintenance & desilting	\$31,900			
35		McKenzie culvert outlet		Engineering reviewing options.	\$2,000	Deferred 22/23
36		Bell Rd Drain outlet		Engineering reviewing options.	\$3,000	
37		Tree maintenance		LB 12.1-12.2	\$5,000	
38		Glyceria spraying various areas by boat.		Various L&R Banks.	\$13,500	Deferred 22/23
39						
40	Stopbanks	Minor floodgates Inspection	\$700		\$1,000	Completed
41		Stopbank miscellaneous maintenance Stop bank mowing above diagonal	\$5,200		\$5,000	Completed
42						
43	Bell Road Floodgates	Floodgate Maintenance & inspections	\$4,000		\$3,700	Completed
44		Deweed/Vegetation maintenance				Completed
45						
46	Managh's culvert	Floodgate Maintenance & inspections	\$3,600		\$3,400	Completed
47						
48	Browns Culvert	Floodgate Maintenance & inspections	\$3,600		\$3,400	Completed
49						
50	Wetland Culvert	Floodgate Maintenance & inspections	\$3,700		\$3,400	Completed
51						
52	Maketū & Other Floodgates	Floodgate Maintenance & inspections				
53		Gravity floodgate redesign			\$4,000	Deferred
54		Singletons Floodgate Fish friendly			\$1,000	Deferred
55		McKenzie culvert replacement (tbc)		Under review	\$15,000	Investigate
56		Armers 900mm cast iron f/g replaced with plastic f/g				Completed
57						
58	Reach 2:					
59	Te Matai to Mangorewa	Riverbank Weed spraying:	\$4,400			
60		Gorse & pampas at existing rockworks		Various	\$3,000	
61		Pampas (Ex Harts) @ existing rockwork		LB	\$2,000	Completed
62						
63		Willow/Vegetation Maintenance	\$1,200			
64		Willow Maintenance		R/b 12.7-12.9 km	\$2,500	Ongoing
65		Willow Maintenance		R/b 16.5-17.09 km	\$2,500	Ongoing
66		Trust Block - McMeeking Road		R/b 16.8-16.9km	\$2,500	Ongoing
67		Willow and bank maintenance		L/B 17.0-17.1	\$2,500	Ongoing
68		Willow Maintenance/removal		L/b 17.45-17.9 km	\$2,500	Completed
69		Willow Maintenance/removal		L/b 21.0-21.2 km	\$5,000	Ongoing
70		Mulch Stop bank Welds drain to KT 13.1 km		13.1km	\$2,500	Deferred 22/23
71		Lower berm (Mc Naughtons)		R/b 18.8-18.9 km	\$5,000	Ongoing
72						
73		Planting:	\$600			
74		Māori Trust - Battering and Willow/native planting.		R/b 17-17.1km	\$8,000	rock installed
75						
76		Rock replenishment	\$36,900			
77		Provisional sum (where required)			\$19,000	
78		Weld's seems to be settling, monitor		L/b 15.1-15.2km	\$1,000	ok
79						
80		Fencing	\$600	Various	\$1,000	
81						
82	Stopbanks	Stopbank miscellaneous maintenance	\$2,200		\$2,000	
83		Floodgate Maintenance	\$700		\$600	
84						
85	Reach 3:					
86	Canals & Drains	Canal & drain weed spraying	\$44,300			
87		Provisional sum (where required)			\$2,500	Completed
88					\$2,500	
89		Raparapahoe/ Kopuaroa various properties			\$3,000	Completed
90		Channel / bank spray maintenance, pampas etc.			\$2,000	Completed
91						
92		Canal & drain repairs and rock maintenance	\$7,800			
93		Provisional sum (where required)			\$2,500	
94		Slaters Drain. Install culvert			\$2,500	Deferred 22/23

95		Singletons Drain Culvert			\$10,000	Completed
96		Singletons reshape R/b			\$7,593	Completed
97		Nuzum's Drain: rockworks		R/b 0.0- 0.050km	\$7,500	Completed
98		Borough Drain: rockworks		L/b 0.0 -0.05 km	\$7,500	partial
99		Provisional sum (where required)			\$5,000	
100						
101		Canal & drain desilting			\$176,800	
102		Aquatic weed spraying general			\$15,000	Completed
103						
104		Riddell's		R/b 0.0-1.0 km	\$2,500	Ongoing
105		Factory Drain Desilting extra cost of \$4582 to be added to this cost ???		Verwey	\$17,500	Completed
106						
107		Canal & drain dewatering and weed cutting			\$36,800	
108		Weed cutter boat general			\$2,000	Completed
109		Kaituna Road		3.4-5.0km	\$7,500	Partial
110		Drain dewatering general			\$30,000	Completed
111						
112		Waiari Stream				
113		Complete minor berm cut-always		L/b 2.0-3.1km	\$1,500	Ongoing
114		Desilt and complete minor erosion repairs, defer to 20-21. Estimated at \$32,000.		0.0 to 1.7km		
115		Jefferson property remove willow blockage install bund			\$4,563	Completed
116						
117		Parawhenuamea				
118		Desilt twice yearly			\$5,000	
119		Parrots Feather spraying x4 yearly			\$2,500	Completed
120		Deweed		R/b 0.0-2.0 km	\$1,500	Completed
121						
122		Kopuaroa Canal				
123		Boat spraying			\$2,500	
124		Stop bank fencing at Dovaston's			\$2,500	Deferred 22/23
125		Tree removal off stop bank toe			\$5,000	
126		Mulch gorse & blackberry - Dovaston's		L/B 1.6-2.2 km	\$1,500	Completed
127		Stop bank survey possible upgrade		LB 3.4-3.6	\$1,500	Ongoing
128		Rock work Washer Ave. (250 tonne)		L/b 2.8-2.85 km	\$8,000	Ongoing
129						
130		Raparapahoe Canal				
131		Willow main various properties		R/b 3.9 - 5.7 km	\$2,000	Ongoing
132		Reshape LB and toe load to Landward toe.		1.7-3.4km	\$50,000	Completed
133		Wooley night shade		L/b 2.6-2.9 km	\$1,000	Completed
134		Drop structure maintenance		3.5km	\$10,000	Completed
135						
136		Ohineangaanga Canal				
137		Remove spoil off berm on right bank		R/b 00.0-0.80km	\$7500 ??	Completed
138		Batter, toe armour and plant		LB 2.7-2.8 DS of bridge		Ongoing
139		Desilt		L/b 0.0-0.5km	\$10,000	Partial
140						
141		Minor clearing of obstructions in tributary streams				
142		Generally upstream highway. Provisional sum approx. 5k per stream			\$20,000	
143						
144		Stopbanks				
145		Stopbank miscellaneous maintenance			\$4,800	
146		Minor floodgates inspections and maintenance			\$1,400	
147		Slaters Drain realign stopbank fence to boundary			\$5,000	Completed
148		Provision for asset defect repairs			\$15,400	
149						
150		Pump Station Maintenance:				
151		Kopuaroa				
152		Pump Maintenance			\$20,900	
153		General Maintenance			\$5,000	Completed
154		Lift No 1 pump riser sand blast and paint			\$3,000	
155		Electrical upgrade switch board ,VSD,s				Completed
156		Pump lifted for repairs				Completed
157		Bell Road A				
158		Pump maintenance			\$7,500	
159		General Maintenance			\$7,000	Completed
160		Bell Road B				
161		Pump maintenance			\$7,500	
162		General Maintenance			\$5,000	Completed
163		Lift for Inspection			\$2,000	Completed
164		Bell Road C				
165		Pump Maintenance			\$20,300	
166		General Maintenance			\$2,000	Completed
167		Mow compound			\$2,500	Completed
168		Diesel			\$5,000	Completed
169		Lift pumps for inspection			\$2,500	Deferred 22/23
170		Signage and fencing			\$1,500	Completed
171		Diagonal Drain				
172		Pump Maintenance			\$24,200	
173		General Maintenance			\$10,000	
174		Reshape ground for lifting pad			\$4,000	Completed
175		install pad over gravity discharge pipe			\$2,500	
176		Lift No 1 pump riser sand blast, paint and refit			\$5,000	Ongoing
177		Security Upgrade, (pole/camera)			\$10,000	
178		Ford Road				
179		Pump Maintenance			\$14,900	
180		General Maintenance			\$5,000	Completed
181		Floodgate maintenance			\$2,500	
182		Lift No 1 pump riser sand blast, paint and refit			\$5,000	on hold replacement
183		Lift pumps for inspection			\$2,500	Deferred 22/23
184		Maketū				
185		Pump Maintenance			\$14,500	
186		General Maintenance			\$2,000	Completed
187		Install false roof (Existing roof cracking)			\$2,000	Completed
188		Floodgate maintenance			\$1,000	Ongoing
189		Discharge headwall repair			\$12,500	Ongoing
190		Armer & Marshall Pumps				
191		Marshall/Armer's pump; Start and stop probes		Diesel	\$6,900	Ongoing
192				Funded by Capex		
193		Pump Electricity			\$113,800	

194					
195	Storm water pumping		\$24,000		
196					
197	Total Annual Maintenance Costs - Lower Kaituna		\$751,600	\$675,419	
198					
199	UPPER KAITUNA				
200	Reach	Work Type & Site	Annual Budget	Location	Estimate
201		Rotorua Scheme Area			
202	General				
203		Fly tipping and rubbish collection/disposal	\$8,500	Fly tipping	\$8,000
204		Traffic management	\$10,000		
205		Pest Control	\$8,500	Pest Control	\$8,000
206	Reach 4:				
207	Rotorua Tributary Streams	Waitetī Stream	\$10,400		
208		Provisional sum: vegetation removal from channel.			\$2,500
209		Replenish Rock 0.9 and 0.7km			\$2,500
210		Erosion repair/remove steel sheet piling			\$90,000
211					
212		Ngongotahā Stream	\$35,200		
213		Provisional sum: vegetation removal from channel.			\$5,000
214		Vegetation Maintenance			\$10,000
215		Planting/planting maintenance			\$2,500
216		Pest plant spraying			\$2,500
217		Fencing			\$2,500
218					
219		Waiowhiro Stream	\$6,900		
220		Provisional sum: vegetation removal from channel.			\$5,000
221					
222		Utuhina Stream	\$13,900		
223		Provisional sum: vegetation removal from channel.			\$2,500
224		Vegetation removal			\$2,500
225		Obstruction removals			\$2,500
226		Erosion repair			
227					
228		Mangakakahi Stream	\$17,300		
229		Provisional sum: vegetation removal from channel.			\$2,500
230		Vegetation removal: 0.2km arborist			\$5,000
231		Vegetation Management: cost share with RLC to increase berm flow/reduce localised flooding.			\$5,000
232					
233		Otamatea Stream	\$6,900		
234		Provisional sum: vegetation removal from channel.			\$5,000
235					
236		Puarenga Stream	\$20,800		
237		Provisional sum: vegetation removal from channel.			\$2,500
238		Replace two culverts at 1.0km			\$12,500
239					
240		Waingaehe Floodway	\$9,000		
241		Remove trees from Charles Rd boundary			\$5,000
242		Remove vegetation from stopbank asset			
243		Encroachment works			
244					
245	Reach 5:				
246	Ōhau Channel & Okere Structure	Ōhau Channel and Okere Control Structure:	\$77,800		
247		Lake Level Monitoring		Remove large fallen gum tree	\$2,500
248		Annual Inspection		Stop log structure repairs	\$12,500
249		Weed Clearing on Structure		Erosion repairs; repair / replenish gabion protection at structure	\$7,500
250		Stoplog Resets		Rock armouring below SH33 bridge	\$2,500
251		Miscellaneous Maintenance			
260		Total Annual Maintenance Costs - Upper Kaituna	\$225,200		\$208,500
261					
262	ANNUAL FLOOD DAMAGE ALLOWANCE				
263		Lower Kaituna	\$181,000		
264		Raparapahoe Canal Batter bank and hydroseed			\$15,000
265		Ohineangaanga Rock work: Flood damage Marshalls, 800 tonne.		L/b 2.4-2.5 km	\$20,000
266		Batter bank and plant (KT122 Tanners: River bank erosion. Rock toe and rotten rock batter)		L/b 18.2-18.9 km	\$2,500
267		Upper Kaituna	\$37,300		
268		Ngongotahā flood repairs/replenishment to LB 3.6km. Rock stockpiled already			\$20,000
269		Ngongotahā Rock replenishment to existing spillways. Rock stockpiled already			\$25,000
270		Mangakakahi Erosion: rock armouring. Rock stockpiled already			\$15,000
271		Total Annual Flood Damage Repair Allowance	\$218,300		\$97,500
272	Overall Kaituna Scheme Total		\$1,195,100		\$981,419

Kaituna Catchment Control Scheme Capital Works Programme 2022-2023

The following table outlines the Kaituna Catchment Control Scheme capital work programme for 2022-2023

Budget figures are from the Annual Plan 2021-2031. There are proposed changes to these figures, incorporating unspent 2021-2022 budgets being carried forward. The proposed revised budget figures are draft until confirmed by Council.

Kaituna Catchment Control Scheme Capital Budget for 2022-2023 is \$1,322,394 (in addition, proposed carry forwards of \$754,000 give a proposed revised budget of \$2,076,394)

Project name and background	Annual Plan Budget 2022-2023	Proposed revised budget 2022-2023	Milestones 2022-2023
<p>Kaituna Pump Replacements</p> <p>As identified in the Asset Management Plan pumps need replacement or upgrading when close to end of life. Pump condition assessments are underway to prioritise replacements. Fish passage regulations require that replacement pumps be fish friendly.</p> <p>The following pumps are scheduled for replacement in 2022-2023:</p> <ul style="list-style-type: none"> • <u>Bell Road A and B pump stations</u> – replace submersible pumps with fish friendly pumps. • <u>Maketū Pump Station</u> <ul style="list-style-type: none"> - replace submersible pump with fish friendly pump. - undertake condition assessment (including underwater inspection) of the outlet structure to assess damaged concrete and sheet piling. 	\$642,178		Pump station repairs and pump replacements completed by June 2023
<p>Kaituna Pump Station Electronic Upgrades</p> <p>Project involving progressively upgrading pump station electronics.</p> <p>In 2022-2023 the focus is upgrades for Armer's and Marshall's temporary pumps, and Bell Road A and B pump stations.</p>	\$108,306		Complete electronics upgrade and remote telemetry installation (Ricardo Remote Monitoring System) by June 2023

Project name and background	Annual Plan Budget 2022-2023	Proposed revised budget 2022-2023	Milestones 2022-2023
<p>Ford Road Pump Station Upgrade</p> <p>The upgrade involves additional pump capacity at the Diagonal Drain pump station located upstream of the Ford Road site and includes:</p> <ul style="list-style-type: none"> • 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 x2 culvert crossings <p>Regional Council received early indication from Rangiuru Business Park that despite their best efforts to manage stormwater on-site, the development will likely result in adverse downstream effects due to the additional volume being created. Mitigating the additional volume within the low-lying land is likely to require increased pump capacity. Rangiuru Business Park is currently undertaking detailed modelling to quantify the required mitigation measures. It is likely that they will be seeking additional pumping capacity at Diagonal Drain pump station.</p> <p><i>There is budget for the physical work components of this project in 2023-2024</i></p>	<p>\$571,910</p>		<p><i>Project currently on hold</i></p> <p>Once third-party modelling has been received (due in November 2022), the project team will regroup and confirm requirements moving forward. These are anticipated to be:</p> <ul style="list-style-type: none"> • Finalise design amendments by March 2023 • Lodge resource consent application by June 2023 • Complete detailed design by August 2023
<p>Upper Kaituna Stopbank Modelling</p> <p>This modelling is part of the Capacity Review of the Rotorua Streams (Upper Kaituna) – Waiteti Stream, Ngongotahā Stream, Waiowhero Stream, Utuhina Stream, Puarenga Stream, Waingaehe Stream.</p> <p>Hydrological modelling has been completed for the Puarenga, Waingaehe and Waiteti streams.</p> <p>The focus for 2022-2023 is on completing hydraulic modelling for the Puarenga, Waingaehe and Waiteti streams, and hydrological and hydraulic modelling for the Waiowhero Stream.</p>		<p>\$51,000 carry forward (to be confirmed)</p>	<ul style="list-style-type: none"> • Hydraulic modelling of the Puarenga, Waingaehe and Waiteti streams completed by June 2023 • Hydrological and hydraulic modelling for the Waiowhero Stream completed by June 2023
<p>Kaituna Mole Upgrade</p> <p>The Kaituna Mole is a river mouth control structure located at the mouth of the Kaituna River. Remedial work providing improved corrosion resistance and concrete capping necessary to maintain the integrity of the existing structure was completed December 2021.</p> <p>Carpark development (including landscaping and toilets) is a Western Bay of Plenty District Council led project with some funding provided by Central Government.</p>		<p>\$250,000 carry forward (to be confirmed)</p>	<ul style="list-style-type: none"> • Carpark scheduled for sealing in October 2022 • Toilets on order with expected delivery in December 2022

Project name and background	Annual Plan Budget 2022-2023	Proposed revised budget 2022-2023	Milestones 2022-2023
<p>Te Puke Stormwater</p> <p>Stage 1 and 2 modelling work to quantify the extent to which development in Te Puke is affecting the Kaituna Scheme has been completed by DHI, with assistance from Blue Duck Limited.</p> <p>This project started in 2019-2020 with option modelling scheduled for completion in 2022-2023 and resulting mitigation works programmed for 2023-2024.</p> <p><i>There is also budget for this project in 2023-2024.</i></p>		<p>\$113,000 carry forward (to be confirmed)</p>	<p>Option modelling completed by June 2023</p> <p>Detailed design for mitigation works completed by June 2023</p>
<p>Utuhina Stream Stopbanks</p> <p>The primary purpose of this project was to review the capacity of the existing stopbank infrastructure and design any mitigation needed to maintain or achieve the agreed level of service.</p> <p>The capacity review is complete and with no identifiable mitigation other than managed retreat being found. The project lead has been passed onto Rotorua Lakes Council to include in their Rotorua for Tomorrow project.</p> <p>Regional Council will provide support to Rotorua Lakes Council with this project.</p>			<p>Project on hold and will be revisited once Rotorua Lakes Council have a better understanding of community aspirations</p>
<p>Ngongotahā Stream Flood Mitigation – Civil Works</p> <p>This project involves implementing the recommendations of the independent Ngongotahā Stream Review and includes:</p> <ul style="list-style-type: none"> • Raising Western Road (Rotorua Lakes Council) • Constructing new stopbanks alongside Brookdale and Streamdale roads • Constructing high flow bypasses on stream bends • Constructing a Southern bypass channel <p>In 2022-2023 the focus is on construction of the high flow bypasses and gaining landowner approval for the remaining work.</p> <p><i>Central Government Climate Resilience Funding has been approved for this project.</i></p>		<p>\$340,000 carry forward (to be confirmed)</p>	<ul style="list-style-type: none"> • High flow bypass consent application lodged by October 2022 • Land access agreements for high flow bypasses by December 2022 • Land access agreements for Southern bypass by June 2023 • Enabling works (Western Road utility relocation) by June 2023 • High flow bypass construction completed by June 2023 • Stopbank detailed design by June 2023

Project name and background	Annual Plan Budget 2022-2023	Proposed revised budget 2022-2023	Milestones 2022-2023
<p>Bell Road modelling</p> <p>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.</p> <p>Modelling shows 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.</p> <p>Recommendation is to reduce the level of service and retire farmland as it becomes uneconomical to farm.</p> <p>Climate Change modelling was completed in December 2021. Decision has been made to rerun the modelling using new ground level information (Lidar) which will improve the reliability of the results.</p>	<p>Unbudgeted</p>		<ul style="list-style-type: none"> • Rerun climate change modelling with latest ground level information by September 2022 • Independent review of recommendations by June 2023

Maintenance Programme 2022-2023

The purpose of this report is to provide an overview of the Kaituna Catchment Control Scheme maintenance work programme for 2022-2023.

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 Asset Management Plan considering 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, water quality improvements
- pump stations - operation, inspections, and maintenance
- culvert and floodgates - inspections and maintenance
- stopbanks - inspections, maintenance, repairs, pest control
- river maintenance - pest plant control, beach shaping, habitat enhancement works
- erosion control – rock refurbishment, edge planting, trenched willows, willow maintenance
- annual flood damage repairs

Key projects in 2022-2023:

- Borough and Seddon Street Drain improvements including upgrading and modifying multiple floodgate structures.
- Lowland drains riparian works in conjunction with Land Management staff implementing best practice drain shaping, fencing and riparian planting following Ministry for the Environment/Dairy NZ guidelines. Approximately 2.8 km of fencing and planting planned along Singleton’s Gravity Drain, Tapsell’s Drain, Crossan’s Drain and Main Outlet Drain.
- Lowland drains culvert installations to improve excavator access and efficiency for drain maintenance.
- Kaituna River willow and vegetation maintenance over approximately 4 km within the area from Kenana Road to McMeeking Road (approximate river distance 11 km to 16 km).
- Ongoing clearing of pest plants and opening of waterways along the Rotorua urban streams.
- Ōhau Channel stoplog improvements and edge protection repairs.

Winter 2022 – how wet is wet?

The Bay of Plenty has had a wet first two months of the winter season, but just how wet has it been and is it unusual?

At the start winter (June 2022) rainfall across the Bay of Plenty were near average for the year, now at the end of July rainfalls are between 10-50% above normal with both June and July showing above normal monthly rainfalls in response to the frequent bands of rain passing over the region.

July was notable for seeing more than double its normal recorded rainfall for the month across the region, with Edgcumbe being notable for have nearly three times its norm. Rainfall totals for the month are July are provided in Figure 1.

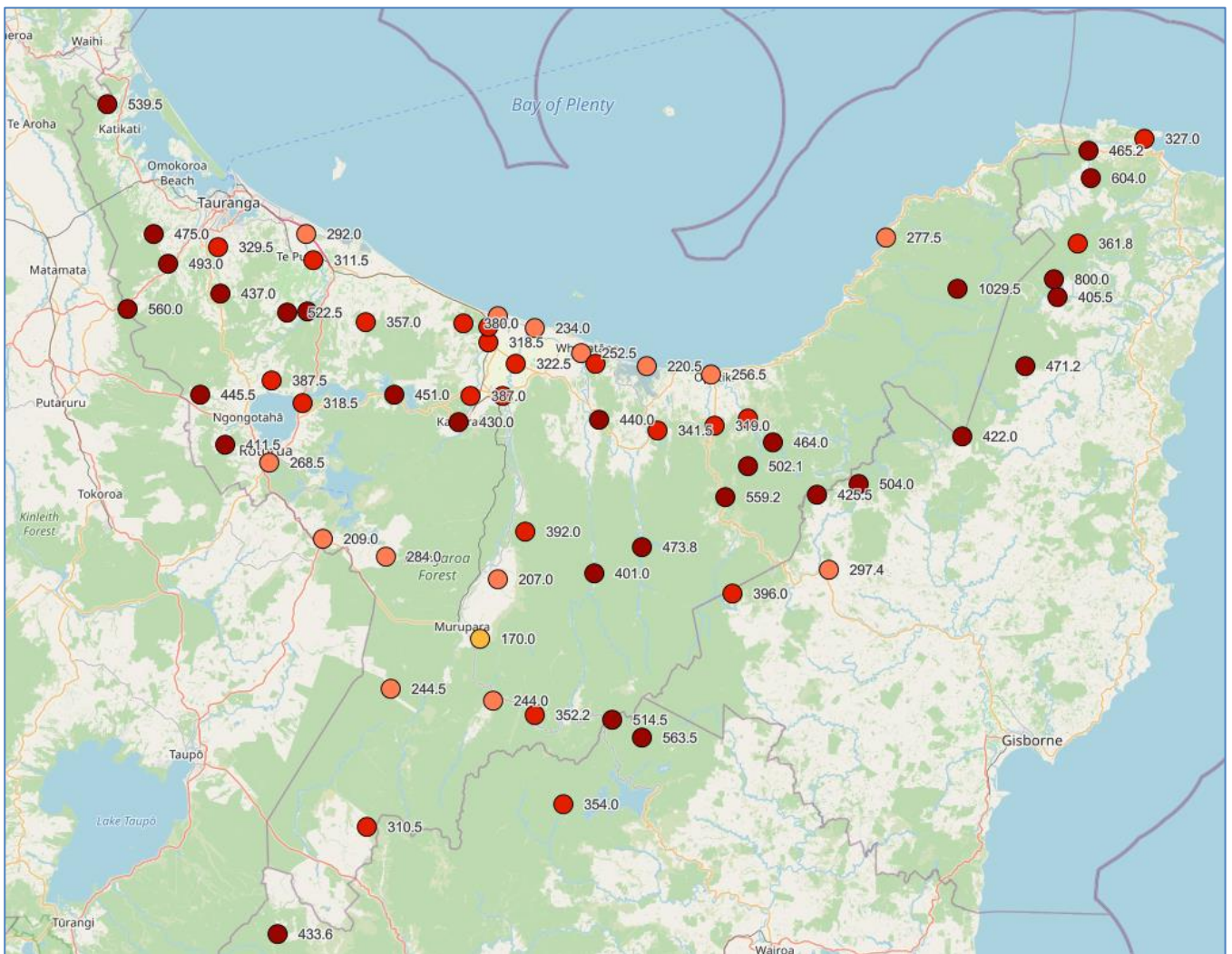


Figure 1: July 2022 rainfall totals (mm)

To provide context of how wet it has been we can compare the previous three-monthly rainfall totals against the last 30 years for the same period and measure its deviation from normal, Figure 2. The general observation is that it has been extremely wet for the region from the lower Rangitāiki Plains westward and very wet for the remainder of the region. The last time these sorts of levels were seen was in the winter of 2017, Figure 3.

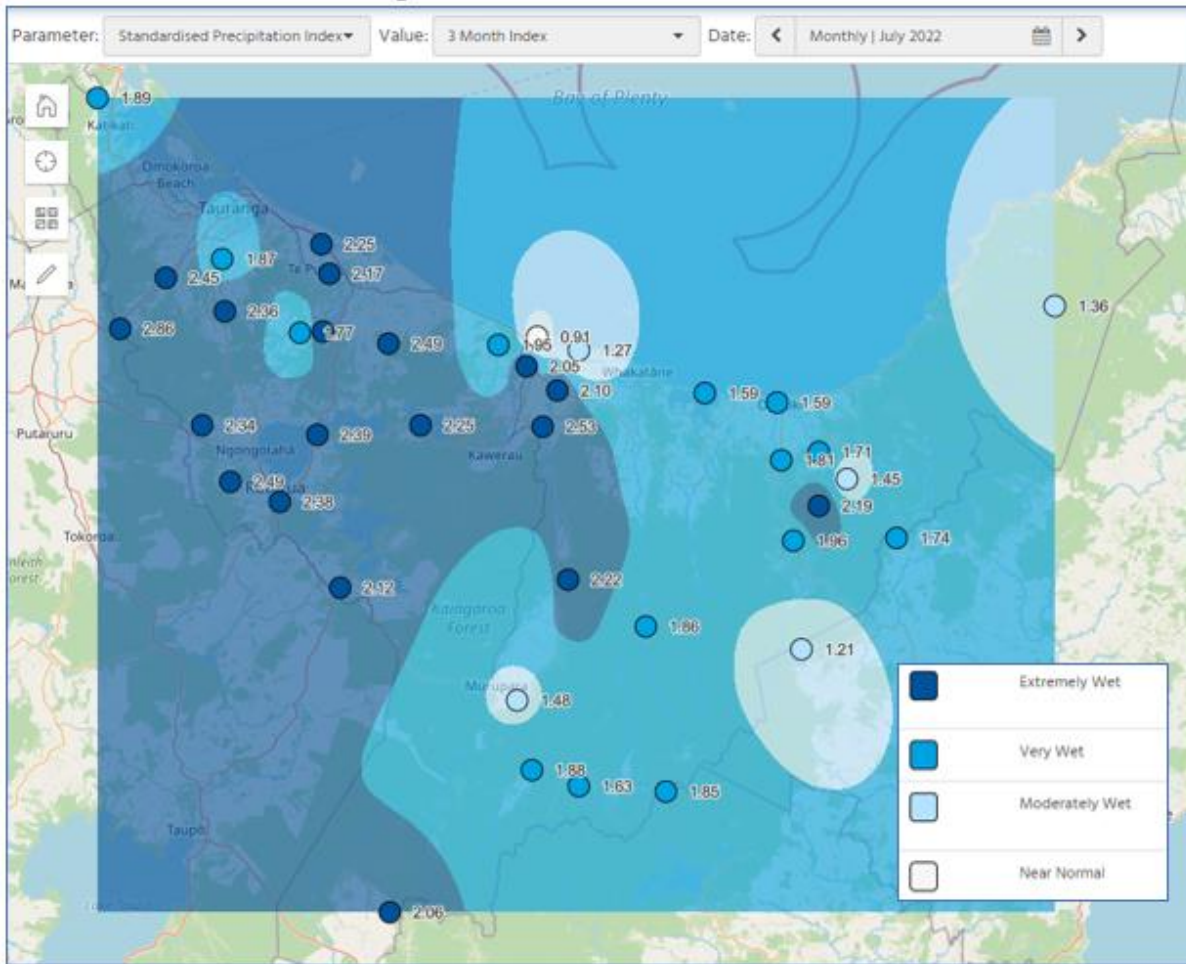


Figure 2: 3-month rainfall deviation from normal

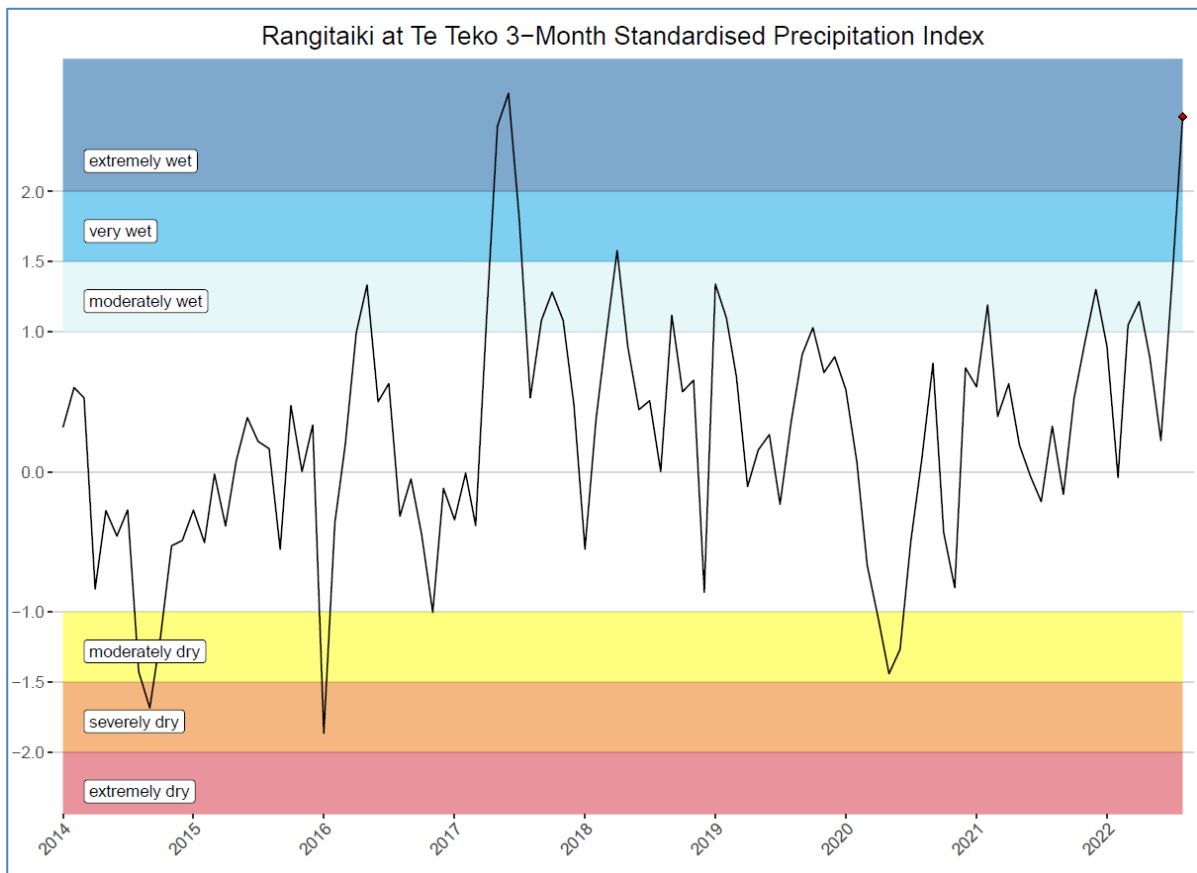


Figure 3: Rangitaiki at Te Teko historical rainfall deviations from normal

Suffice to say, teams within Bay of Plenty Regional Council have been flat out for weeks issuing flood management alerts and attending to drainage and pumping networks including running additional mobile pumps where extra is needed. There is also a lot of riverbank erosion becoming evident in many of the rivers we manage as the river levels have been elevated for weeks. Frequently, repair works are also not possible straight away as ground conditions are usually too wet and soft for heavy machinery to access sites.

We should all be aware that soil moisture levels are high and any significant rain in the coming months may result in an increased chance of resulting flooding in surface areas and rivers.

Kaituna Catchment Control Scheme Pump Statistics

In the 61 days of June-July 2022, Bell Road C's two submersible pumps ran on 50 of the 61 days, for a total of 680 hours or 13:36 hours per day. The usual diesel budget for Bell Road C Pump Station is \$5,000 annually. In 2020 and 2021 calendar years it needed three deliveries of fuel. As of 2 August 2022, fuel has been delivered 21 times at a cost of \$42,352 (+GST).

The Armer's and Marshall's pumps were commissioned in early 2019 and in the 40 months until 1 June 2022 they had run a total of 1278 hours combined. In the approximate two months from 1 June to 27 July 2022, they ran for a further 1025 hours combined. At 6-10 litres per hour, they consumed approximately 8200 litres of diesel in two months. In addition to this, a further diesel pump was installed at each site to keep clear the flood waters.

At Diagonal Drain Pump Station, in the 61 days of June-July 2022, the four submersible pumps run time totalled 2077 hours. The lowest pump hours on any single day during this period was 21 hours and averaged at approximately 34 hours of pumping per day. Electricity consumption trends for Diagonal Drain Pump Station is shown in Figure 4.

CURRENT ACCOUNT DETAILS (SINCE LAST READING) - For the period 01 Jul 22 to 31 Jul 22

Charge type	Energy charges	Distribution and Transmission charges
Energy Charge	\$10,354.81	
EA Levy	\$59.27	
Metering Fee	\$99.00	
Line Charge		\$1,604.46
Subtotals	\$10,513.08	\$1,604.46
GST	\$1,576.96	\$240.67
Totals	\$12,090.04	\$1,845.13

Total current charges

\$13,935.17

USAGE INFORMATION

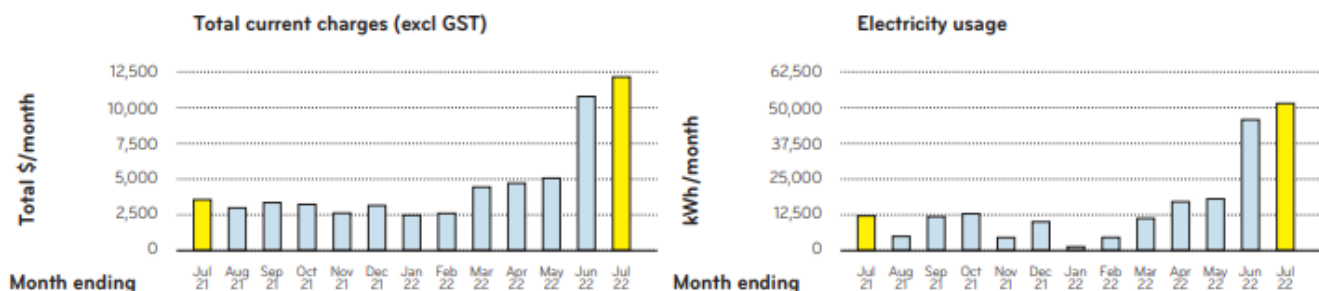


Figure 4: Electricity usage for Diagonal Drain Pump Station (1 July 2022 to 31 July 2022)

Maintenance programme budget 2022-2023

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 by type of 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 2022-2023		
Lower Kaituna		Annual Budget
	General	17,000
	Flood Damage Allowance	181,000
	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	254,500
	TOTAL LOWER KAITUNA	\$932,600
Upper Kaituna		
	General	27,000
	Flood Damage Allowance	37,300
	Reach 4 (Rotorua Streams)	120,400
	Reach 5 (Ōhau Channel)	77,800
	TOTAL UPPER KAITUNA	\$262,500
KAITUNA SCHEME TOTAL		\$1,195,100

Kaituna Catchment Control Scheme - 2022-2023 Maintenance Programme Budget Summary

	Category	Description of work	Annual Budget
1	General		\$44,000
2	Lower	Fly tipping, rubbish collection and disposal	\$8,500
3		Pest Control	\$8,500
4	Upper	Fly tipping	\$8,500
5		Pest Control	\$8,500
6		Traffic management	\$10,000
7	Riverbank and Estuary Maintenance		\$59,400
8	Lower	Weed spraying, mulching, tree clearing, and vegetation planting	\$59,400
9	Rock Replenishment		\$83,300
10	Lower	Maketu foreshore and other sites	\$83,300
11	Fencing Maintenance		\$5,100
12	Lower	Various	\$5,100
13	Stopbank Maintenance		\$13,600
14	Lower	Inspections and maintenance	\$13,600
15	Floodgate Structures Maintenance & Inspections		\$31,700
16	Lower	Various	\$31,700
17	Canal and Drain Maintenance and Repairs		\$265,700
18	Lower	Aquatic weed spraying, dewatering, weed cutting, desilting and erosion repairs	\$265,700
19	Minor Clearing of Obstructions in Tributary Streams		\$21,300
20	Lower	Generally upstream Te Puke Highway	\$21,300
21	Pump Station Operations and Maintenance		\$116,700
22	Lower	All pump stations (9)	\$116,700
23	Pump Station Electricity and Diesel		\$137,800
24	Lower	Electricity	\$113,800
25		Diesel (Bell Road C, Armer's, Marshall's and mobile pumping)	\$24,000
26	Rotorua Streams - Vegetation Maintenance, Clearing and Erosion Repairs		\$120,400
27		Waitetī	\$17,500
28		Ngongotahā	\$31,900
29		Waiowhiro	\$5,000
30		Utuhina	\$14,000
31		Mangakakahi	\$14,000
32		Otamatea	\$7,500
33		Puarenga	\$14,000
34		Waingaehe Stream and Floodway	\$16,500
35	Ōhau Channel and Okere Control Gates		\$77,800
36		Operations, maintenance, erosion repairs and monitoring	\$77,800
37	Annual Flood Damage Allowance		\$218,300
38		Lower Kaituna	\$181,000
39		Upper Kaituna	\$37,300
40			
41	Totals	Operational Maintenance	\$976,800
42		Annual Flood Damage Allowance	\$218,300
43		TOTAL	\$1,195,100

MEMORANDUM



To: Kaituna Catchment Control Scheme
Advisory Group

From: Kirsty Brown
Rivers and Drainage Assets Manager

Date: 11 August 2022

File Ref:

Subject: Update from the Te Maru o Kaituna River Authority

This report has been created to facilitate better communication flow between the advisory group and Te Maru o Kaituna River Authority (TMoK), by providing a high-level overview of key topics from the TMoK meeting held 20 May 2022.

1. Pātaka Kai Project Update

Presentation Pātaka Kai Project – increase and enhance habitats for kai awa.

2. Chairperson’s Verbal Update

- Secretariat appointment update.
- AFFCO consent pre-hearing meeting.
- Freshwater Vision letter.
- Navigation Safety Bylaws Review
- Te Maru o Kaituna River Authority – Tapuika/Waitaha vacancy
- Western Bay of Plenty District Council – marae wastewater reticulation and on-site treatment.

3. Te Maru o Kaituna Action Plan, March to May 2022 Status Report

Presentation Te Tini a Tuna Quarterly Report, March-May 2022.

4. Essential Freshwater Policy Programme Update

Update of Toi Moana’s Essential Freshwater Policy mahi relevant to the Kaituna co-governance area, and a brief update on Regional Policy Statement (RPS) Change 5 (Kaituna River).

5. Kaituna Catchment Control Scheme Advisory Group Update

High level overview report on key topics from the 4 April 2022 advisory group meeting.

To view the full TMoK meeting agenda, minutes and presentations, visit www.boprc.govt.nz/your-council/council-and-region/committees/te-maru-o-kaituna-river-authority

A handwritten signature in black ink, appearing to read 'K. Brown', with a large, stylized initial 'K' at the start.

Kirsty Brown
Rivers and Drainage Assets Manager

MEMORANDUM



To: Kaituna Catchment Control Scheme
Advisory Group

From: Kirsty Brown
Rivers and Drainage Assets Manager

Date: 11 August 2022

File Ref:

Subject: Asset Management Planning

The purpose of this report is to highlight to members the changing river management environment and how we might incorporate evolving principles and best practice into our asset management planning and service levels.

One of the central themes for our next Long Term Plan and Asset Management Plan reviews will be supporting our communities to be more sustainable and resilient now and into the future, not just environmentally but also socially, culturally, and economically.

This will require a shift in our thinking, in particular for ongoing and future flood and erosion works on both rural and urban land, focusing on enabling river catchments to behave more naturally with less frequent interventions. This will change the way river works are managed with a focus on adaptability, maximising natural river processes while continuing to meet flood protection levels of service. Future solutions may involve providing more room for the river and using natural and nature-based flood risk management solutions.

This development in approach will be signalled within the review of the Rivers and Drainage Asset Management Plan. Clear levels of service and guidelines on triggers and scales of intervention for each scheme will be needed to support the change. Engagement with river scheme advisory groups on the implications of what is proposed will be valuable as the review progresses (scheduled for adoption with the Long Term Plan in June 2024).

We are also entering a time of change with central government reforms and policy changes signifying a new way of delivering services within local government e.g., Te Mana o Te Wai which puts the well-being and health of our rivers at the centre of how we manage our freshwater and specifically mandates requirements for working with our iwi partners.



Kirsty Brown
Rivers and Drainage Assets Manager

MEMORANDUM



To: Kaituna Catchment Control Scheme
Advisory Group

From: Kirsty Brown
Rivers and Drainage Assets Manager

Date: 11 August 2022

File Ref:

Subject: General Business Report

1 **River Scheme Advisory Group's Terms of Reference Review**

As advised at our last group meeting, a review of the 2016 Terms of Reference (TOR) for our four river schemes advisory groups has been underway. The main purpose of this review is to confirm that the purpose of the advisory groups remains appropriate and to consider how the group might assist in achieving our Long Term Plan strategic impact areas: Partnerships with Māori, Climate Change and Community Participation. The review has also supported addressing concerns raised in the 2021 online survey, e.g. barriers to meeting attendance.

A copy of the draft TOR (attached) was circulated via email on 19 July 2022 with the option of providing feedback prior to the September round of group meetings. The main enhancements include:

- A clause that provides an opportunity for members to be reimbursed for time or mileage if they are required to travel or take time off work to attend meetings.
- The inclusion of the following four guiding principles to support the work of the advisory groups:

- **Adapting to our changing climate**

The Bay of Plenty's climate is changing, and these changes will continue for the foreseeable future. Adaptation is essential to ensure our River Schemes remain sustainable and resilient in the long term. The work of the Advisory Groups helps to manage the effects of changing climate.

- **Working effectively with Māori to deliver outcomes for the region**

Implementing the principles of the Te Tiriti o Waitangi (The Treaty of Waitangi) collaboration and partnership will guide the work of the Advisory Groups. The Council has an opportunity to work effectively with Māori by establishing appropriate Māori participation through Advisory Groups. Hearing Māori perspectives and the inclusion of cultural values (such as Mātauranga Māori) will ensure river management and flood protection solutions remain consistent with community expectations. Diversity within the River Advisory Groups is

encouraged and supported as it reflects the diversity in our wider community.

- **Community participation**

Members will assist with the sharing of scheme information to ratepayers and residents and promote opportunities for participation and collaboration.

- **Sympathy with natural processes**

Evolving best practice in river engineering and management in New Zealand is being shaped by the “Making Room for the River” philosophy. This approach tends to a more natural and less engineered/confined river system, to improve overall river and ecological health.

2 Condition and Performance Assessments

Our Rivers and Drainage Asset Management Plan sets out a programme of condition and performance assessments for our flood protection and drainage infrastructure assets. The next round of assessments are due to commence this financial year.

Asset condition is a measure of the physical state of an asset which is visually assessed by staff/contractors and graded from 1 (very good) to 5 (very poor).

The below tables summarise the condition rating results for 2020/21 for Council’s upper and lower Kaituna stopbank network. For stopbanks, the ‘count’ is each 100 metre inspection point and for culverts/floodgates the ‘count’ is the actual asset. Data collected during the field assessment provides information for maintenance programmes and renewal proprieties.

Upper Kaituna

Year	2020/21
Asset Condition Rating Scores	%
1 Very Good	0%
2 Good	25%
3 Moderate	34.7%
4 Poor	18.1%
5 Very Poor	22.2%
Total	100

Asset	1 - very good	2 - good	3 - moderate	4 - Poor	5 - very poor	
Stopbank	0	16	23	9	1	
Culvert	0	2	2	2	5	
Floodgates	0	0	0	2	10	
Total	0	18	25	13	16	72

Lower Kaituna

Year	2020/21
Asset Condition Rating Scores	%
1 Very Good	18.8%
2 Good	43.8%
3 Moderate	29.1%
4 Poor	7.4%
5 Very Poor	0.9%
Total	100

Asset	1 - very good	2 - good	3 - moderate	4 - Poor	5 - very poor	
Stopbank	148	314	229	51	7	
Culvert	1	46	11	8	0	
Floodgates	17	26	17	6	1	
Totals	166	386	257	65	8	882

While condition assessment looks at the physical state of an asset, performance assessment is a ‘whole picture’ analysis by assessing required service levels, asset condition, intrinsic strength, capacity, geology, and the potential risks to communities.

These assessments use the performance assessment framework and tool developed for the NZ River Managers Special Interest Group and produce a risk profile for each river’s assets segmented, from 1 (very low) to 5 (very high).

3 Lake Rotorua levels

Regional Council data shows that Lake Rotorua has experienced its highest sustained lake levels since 2017 following heavy rainfall through June and July. The attached media release provides a summary of the situation and Mark Townsend will provide further information at the meeting.

4 Local Elections 2022

Local Government elections are being held this year for the Regional Council’s 14 councillor roles. Postal voting opens on 16 September and closes Saturday, 8 October 2022. For more information on the local elections, please visit: <https://www.boprc.govt.nz/your-council/council-and-region/representation-and-elections>.

For your information, Councillor Bruning is not seeking re-election. Norm has been a key member of the advisory groups for several years, and we would like to thank him for his invaluable service to us and our communities over the years.

Kirsty Brown
Rivers and Drainage Assets Manager

Rivers Scheme Advisory Group Terms of Reference 2022

For Kaituna Catchment Control Scheme, Waioeka-Otara Rivers Scheme, Whakatāne-Tauranga (formerly Waimana) Rivers Scheme, and Rangitāiki-Tarawera Rivers Scheme.

1.0 Purpose of the River Scheme Advisory Groups

- To connect regularly with those communities that benefit from and contribute to the work the Regional Council delivers to maintain and improve our river schemes.
- To enable discussion on the Regional Council's rivers and drainage work programmes and levels of service; and
- To discuss how we might adjust current practices, where necessary, to support sustainable river scheme management.

2.0 Guiding Principles

The following principles will guide the work of the Advisory Groups:

• Adapting to our changing climate

The Bay of Plenty's climate is changing, and these changes will continue for the foreseeable future. Adaptation is essential to ensure our River Schemes remain sustainable in the long term. The work of the Advisory Groups helps to manage the effects of a changing climate.

• Working effectively with Māori to deliver outcomes for the region

Implementing the principles of the Te Tiriti o Waitangi (Treaty of Waitangi) collaboration and partnership will guide the work of the Advisory Groups. The Council has an opportunity to work effectively with Māori by establishing appropriate Māori participation through Advisory Groups. Hearing Māori perspectives and the inclusion of cultural values (such as Mātauranga Māori) will ensure river management and flood protection solutions remain consistent with community expectations. Diversity within the River Advisory Groups is encouraged and supported as it reflects the diversity in our wider community.

• Community Participation

Members will assist with the sharing of scheme information to ratepayers and residents and promote opportunities for participation and collaboration.

- **Sympathy with Natural processes**

Evolving best practice in river engineering and management in New Zealand is being shaped by the “Making Room for the River” philosophy. This approach tends to a more natural and less engineered/confined river system, to improve overall river and ecological health.

3.0 Scope of activity

The role of the Advisory Group is as follows:

- To be a local contact on rivers and drainage issues.
- To share information to and from river scheme communities, stakeholders and tangata whenua.
- To act as a voice for the community to inform the planning and delivery of scheme works.
- Provide community views and input into key Rivers and Drainage management plans and strategies.
- Provide a feedback forum for Council on Rivers and Drainage proposals, projects and changes.
- To make recommendations on scheme management and operations including:
 - Capital and maintenance work
 - Proposed annual work programmes and budgets
 - Floodplain Management Strategies, and
 - Integrated and collaborative management opportunities.

4.0 Status

Local input and advice from Advisory Groups is essential for effective scheme management and is highly regarded by Council. While the Advisory Group has no statutory basis or delegated functions of Council it can make recommendations on Council matters.

5.0 Membership

The number and structure of members is intended to achieve a broad representation of the community covering the geographical extent of the Scheme, tangata whenua and various rating categories. The Council may appoint additional members to best meet the needs of the scheme. *(Each scheme-specific ToR will have its Membership Schedule inserted here from the Membership Schedule below).*

6.0 Appointment and term of service

Members will be appointed for a period of three years with a maximum term of six years. If an Advisory Group does not achieve its desired number of members, existing members who have exceeded their appointment period may continue for a further three-year term(s) by appointment.

Group membership consists of tangata whenua, territorial authorities, and targeted rate payers. Ratepayer representatives must be a targeted ratepayer in the Scheme to be eligible for nomination.

Ratepayer representatives are determined by the Council following a public or consultation process.

Council may appoint members representing special interests within the Scheme.

An elected member of the Regional Council will be the Chairperson.

Members who are unable to complete their three-year term may be replaced by either Council or the authority they represented.

7.0 Meeting frequency and operation

There will generally be two meetings held per year in March and September called by the Chairperson or delegate.

Meeting agendas will be compiled by managers and staff who will also service the meeting.

Council will assist with personal expenses incurred in meeting attendance, in keeping with Council's Expenses and Allowances Policy. Claims in this regard are voluntary.

8.0 Conflict of interest

Members are required to bring to the attention of the Chairperson any conflict of interest or potential conflict they may have with any item on the agenda.

If a member is deemed to have a real or perceived conflict of interest in a matter that is being considered at a meeting, he/she will be excused from discussions and deliberations on the issue where a conflict of interest exists OR must not be present for consideration of that matter.

9.0 Confidentiality

During the course of the business of the Advisory Group, a member will, from time to time, be privy to confidential information. Any confidential information is protected and should not be disclosed until a resolution of the Advisory Group to release the information has been made.

10.0 Communication and reporting

The line of communication between Council and the Advisory Group will generally be through the Regional Council General Manager and the Advisory Group Chairperson.

Issues or recommendations arising from Advisory Group meetings will either be addressed by Scheme Managers or referred to the Council.

Information updates to Members will be circulated by email.

Information updates to scheme ratepayers will be made available via media releases, information posted on the Council web site and/or by email.

11.0 Terms of Reference review

The Council may review this Terms of Reference at any time if it considers circumstances or its community collaboration processes have changed. Prior consultation with the Advisory Group members will occur if a review is being considered.

Lake Rotorua highest level in five years

29 JULY 2022

Lake Rotorua is experiencing its highest sustained levels since 2017 following heavy rainfall in June and July according to Bay of Plenty Regional Council data.

The latest data shows the lake level has risen 600mm since April 2022 and Engineering Manager Mark Townsend says don't expect the level to drop quickly.

The water from Lake Rotorua flows out through the Ōhau Channel and stop-logs were removed in early June to allow more water to flow out of the lake.

"There's only so much water that can go out the Ōhau Channel so there's no quick fix", Mr Townsend says.

"Continued rain will result in the high Lake Rotorua levels being sustained for longer and could even rise further."

The high lake level will affect stormwater drainage in the lower reaches of the streams that flow into Lake Rotorua and there is likely to be increased erosion along lake frontages.

Regional Council has been communicating with Rotorua Lakes Council staff regarding stormwater issues in low lying areas as they are working to keep stormwater outlets clear to prevent flooding

It should also be noted that the level of Lake Rotoiti is controlled via the Okere Gates so this does not affect the levels in Lake Rotorua.

ENDS



Ohau Weir.

*For further media information, please contact media@boprc.govt.nz
(<mailto:media@boprc.govt.nz>)*