

Monday 5 February 2024

OIA IRO-548

Name: [REDACTED]

Email: [REDACTED]@gmail.com

Kia ora [REDACTED]

Official information request regarding Seaview Wastewater Treatment Plant.

Thank you for your official information request dated Monday 20 November 2023, which was transferred to us from Hutt City Council Thursday 14 December 2024.

The Local Government Official Information and Meetings Act 1987 (the Act) requires that we advise you of our decision on your request no later than 20 working days after the day we received it. Unfortunately, we cannot meet the timeframe and must therefore extend the time to make our decision to Monday 19 February 2024.

This extension – which is being made in accordance with [Section 14\(1\)\(b\)](#) of the Act – is necessary because consultations necessary to make a decision on your request are such that a proper response cannot reasonably be made within the original time limit.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Ngā mihi,

[REDACTED]

[REDACTED]

Governance Coordinator

For the latest news and updates, follow us on our social channels:

 /wellingtonwater  @wgtwaternz & @wgtwateroutage  @wellington_water

www.wellingtonwater.co.nz

Our water, our future.

Friday 16 February 2024

OIA IRO-548

Name: [REDACTED]
Email: [REDACTED]@gmail.com

Kia ora [REDACTED]

Official information request regarding Seaview Wastewater Treatment Plant.

Thank you for your official information request dated Monday 20 November 2023, which was transferred to us from Hutt City Council on Thursday 14 December 2023. The part of your request that was transferred to us was the following:

1. Any requests to Central Government for funding to replace, fix or remediate the Seaview Wastewater Treatment Plant.
2. Any reports or advice about long term plans for the performance of the Seaview Wastewater Treatment Plant.

We have considered your request in accordance with the Local Government Official Information and Meetings Act 1987 (the Act) and determined that we are able to grant your request in part.

Funding and advice requests to fix the Seaview Wastewater Treatment Plant forms parts of broader advice we provide to Hutt City Council (HCC). Please see these enclosed in our email.

Pursuant to [Section 7\(2\)\(a\)](#) of the Act, names and contact details are redacted to protect the privacy of individuals.

Wellington Water has not made any funding requests to Central Government to repair the Seaview Wastewater Treatment Plant therefore, in accordance with [Section 17\(e\)](#) of the Act, we cannot grant this part of your request.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Ngā mihi,

[REDACTED]

[REDACTED]
Head of Service Planning

For the latest news and updates, follow us on our social channels:

 /wellingtonwater  @wgtwaternz & @wgtwateroutage  @wellington_water

www.wellingtonwater.co.nz

Our water, our future.

TO [REDACTED], Strategic Advisor, Hutt City Council (HCC)

COPIED TO [REDACTED], Manager Service Planning, Wellington Water

[REDACTED], GM Customer Operations

FROM [REDACTED], GM Network Strategy & Planning

DATE 04 November 2022

Preliminary Advice to HCC on Three Waters Services Capital Delivery Plan for the Financial Years 2023/24 and 2024/25

Action sought

	Action sought	Deadline
[REDACTED] Strategic Advisor, HCC	Note the recommendations in this paper. Meet with Wellington Water to discuss proposals for delivery outlined in this paper.	30 November 2022

Purpose

1. This paper informs HCC (referred to hereon in as 'Council') of:
 - a) the indicative budget that Wellington Water is requesting Council allocate for financial year (FY) 2023/24,
 - b) an indicative budget range for FY 2024/25, and
 - c) risks to the capital delivery plan (CDP).
2. The paper does not provide details of specific projects that will be delivered during FY 2023/24; this is currently being developed and will be issued to Council in December 2022.

Recommendations

3. Wellington Water recommends that Council:
 - a) **notes** the budget for FY 2023/24
 - b) **notes** the intention to carry over any remaining budget from FY 2022/23 into the final budget for FY 2023/24 and the estimated values of these carry-overs

- c) **notes** that the list of projects to be delivered in FY 2023/24 are currently under development and will be issued to Council in December 2022
- d) **notes** that the total value of the proposed projects will exceed the proposed budget and the council's long-term plan (LTP) budget for FY 2023/24; this is purposely to help mitigate delivery of risk of underspending against council budgets
- e) **considers** the risks presented in this memo
- f) **notes** that industry wide cost pressures mean fewer projects can be delivered under current budget levels than initially planned for in the LTP
- g) **notes** the proposal to work with Council to continue to optimise the FY 2024/25 programme ahead of the preparation of the next draft annual plan and engagement with the National Transition Unit

Introduction

- 4. Wellington Water is committed to providing service excellence to Council. Our focus is on delivering the right assets at the right time; whether that be a renewal, level of service increase or to support growth, although our current emphasis is on renewals.
- 5. We are also working to improve the efficiency of our programme delivery. Beginning to bring in projects from the Very High Criticality Assets (VHCA) assessment programme will contribute to improving our effectiveness.
- 6. Over the past year Wellington Water has experienced significant increases in the costs of material and labour due to higher than anticipated inflation and market capacity pressures. This has placed pressure on Council's capital expenditure (Capex) programme, meaning fewer projects are able to be delivered than initially planned for in the LTP. There is a risk that the current levels of inflation continue, or potentially increase, through 2023 and 2024. This will continue to impact the costs of projects as currently scoped, necessitating either rescoping of key projects, reallocation of budgets from lower priority projects, or increased budgets from Council.

FY 2023/24 Capital Expenditure (Capex)

- 7. The **budget requested for FY 2023/24 is \$85.5M**. This aligns with the budget information provided to Wellington Water on 20 October 2022.
- 8. Further work is required to provide greater certainty of the budget required to deliver Council's FY 2023/24 Capex programme, taking regional deliverability into account. Until this additional work has been completed, Wellington Water asks that Council retain the LTP approved budget for FY 2023/24, including any carry-overs from FY 2022/23, but note that this figure could shift.
- 9. Further information on the projects to be delivered is currently being finalised and will be presented in an update to this memo in December 2022.
- 10. In a similar manner to the approach adopted for the Year 2&3 CDP, we will target a total project value of the programme for FY 2023/24 of 120% of the proposed budget i.e., \$102M. This over-programming against the proposed budget is purposely introduced to mitigate delivery risks and optimism bias in delivery capacity.
- 11. Wellington Water intends to manage the delivery of these projects within the agreed budgets, using delegated authorities within Wellington Water and Council to manage movements between council budgets as required.

12. Progress against the budget spend will be reported throughout FY 2023/24 via the established monthly finance and programme meetings.
13. Once finalised, the programme of works (projects list) will be updated throughout the remainder of the financial year as project information develops. Updates will be presented to Council on a quarterly basis.
14. Key risks to the FY 2023/24 programme include availability of resources (materials and personnel) across the region and the challenges associated with the transition to Entity C under Water Reforms. These are detailed later in this memo.

FY 2024/25 Capex

15. Wellington Water has been working on sustainably growing the Capex programme over the past few years. Providing a signal of investment is an important way to continue to grow the delivery capability and capacity in the region and provide greater certainty to the market of ongoing three waters investment into the future.
16. Continuing with this growth model, a budget range for FY 2024/25 is being provided at this point. This range will be further refined throughout FY 2023/24 as the next 3-year Long-Term Plan (LTP) is developed, noting that FY 2024/25 falls into the next LTP cycle.
17. Council's budget range for FY 2024/25 is estimated at \$60m to \$83m.
18. The lower figure is aligned with the HCC 10-year LTP values for FY 2024/25. This is similar to the low-point of the 'sustained uplift' approach, adopted by Wellington Water for Years 1-3 of the current LTP, projected into FY 2024/25.
19. The upper figure represents sustainable growth of 30% year-on-year from the anticipated FY 2022/23 spend.
20. The programme of projects for delivery in FY 2024/25 will be further developed throughout FY 2023/24. This work will also provide greater certainty of the budget range for FY 2024/25.

Risks

21. Water Reforms and Transition to Entity C – has potential to disrupt delivery of the capital programme if not managed well. Areas of note, include funding mechanisms and contracting arrangements for existing and new projects; alignment of governance structures across the entities and change management, including personnel experience for those transitioning to the new entity.
22. Inflation – as noted, there is a risk that current levels of inflation continue, or potentially increase, over the Y3&4 period. If so, this will require decisions from Council on whether key projects should be re-scoped, budgets reallocated from lower priority projects, or increased budgets provided from Council.
23. Regional Water Supply – an issue was recently identified regarding a significant increase in the amount of leakage from the potable water supply across the region. Provision of safe drinking water is a key priority for Wellington Water, and it may be necessary to reprioritise resources (and budgets) to address issues on potable water supply. Wherever possible, we will do this within agreed budget envelopes, but where this cannot be achieved within the potable water budgets, we will present options for discussion with Council.
24. Resource and Supply Chain Constraints – there is currently an industry-wide constraint in availability of resources (both materials and personnel) which may impact the delivery of projects. To mitigate the likelihood and impact of this risk, we have worked with consultants and contractors to only propose projects that we are confident of delivering within the current constraints.

25. Delivery of Proposed Capital Delivery Programme – historically, Wellington Water has underspent capital against council budgets. We have worked to mitigate this risk by over-programming against the LTP across the three years.
26. Future delivery of the assets assessed as part of the VHCA programme – The VHCA condition assessment project sought to identify which of the Council's very high criticality three waters assets are in poor condition requiring renewal in the short term. The programme has identified and scoped some of the work required to renew VHCA assessed assets. However, the full scale of future investment required on these assets is not yet fully understood. Council should anticipate that Capex funding above current levels will be required in future years to complete these critical works; the future capital delivery programme to bring these most critical assets up to standard will be significant.
27. COVID Pandemic – we continue to face impacts of the global COVID pandemic. It is likely to present challenges with global supply chains, freight and transportation and associated price increases, which will impact delivery of the programme.

Next steps

28. Meet with Council in December 2022 to review the proposed budgets and projects.
29. Progress against the budget spend will be reported throughout FY 2022/23 via the monthly finance and programme meetings, and should any variance be noted, the impacts on the FY 2023/24 budget will be communicated via updates to this memo.
30. Agree any carry-over budgets from FY 2022/23 with Council and incorporate into the final budget for FY 2023/24 delivery.
31. Once the FY 2023/24 draft budget is agreed with Council, we will communicate the plan with Wellington Water Business Units, the Consultant Panel and Contractor Panel, and commence delivery.
32. We will develop the FY 2024/25 plan through FY 2023/24 with a plan to submit the final FY 2024/25 CDP in April 2024.
33. We are committed to working with you and look forward to meeting to discuss the content of this memo.

██████████
GM Network Strategy & Planning

Ph: ██████████

██████████@wellingtonwater.co.nz

TO [REDACTED], Strategic Advisor, HCC

COPIED TO [REDACTED], Manager Service Planning
[REDACTED], GM Customer Operations

FROM [REDACTED], GM Network Strategy & Planning

DATE 4 November 2022

PRELIMINARY THREE WATERS 2023/24 ANNUAL PLAN OPEX ADVICE FOR HUTT CITY COUNCIL

	Action sought	Deadline
[REDACTED] Strategic Advisor, Hutt City Council	Note the recommendations in this paper. Meet with Wellington Water to discuss content of this paper.	30 November 2022

Purpose

1. This paper informs Hutt City Council (Council):
 - a) of the approved 2023/24 Long Term Plan (LTP) operational expenditure (OPEX) budget, and the risks of keeping the budget at this level, and
 - b) that Wellington Water advises additional OPEX funding should be provided above the 2023/24 LTP approved level to maintain existing levels of service and that subsequent advice on a proposed 2023/24 OPEX budget will be provided to Council in February 2023.

Recommendations

2. Wellington Water recommends Council:
 - b) **notes** the risks associated with keeping the FY 2023/24 OPEX budget at the LTP approved level
 - c) **notes** that Wellington Water will provide subsequent advice on the recommended OPEX budget for FY 2023/24, and that this will exceed the approved 2023/24 LTP budget
 - d) **notes** advice on FY 2024/25 OPEX budgets will be provided as part of Wellington Water's FY 2024-2034 LTP advice
 - e) **notes** the FY 2021-31 LTP OPEX budget does not include funding for significant emergency events, which Council funds separately
 - f) **notes** that Wellington Water will need a response from council on whether it accepts the risks outlined in this document related to continuing with the FY 2023/24 OPEX LTP approved budget or is willing to provide Wellington Water with additional OPEX funding to reduce risks and maintain existing levels of service.
 - g) **agrees** to increase the FY 2023/24 OPEX budget above the approved 2023/24 Long Term Plan level for the following priority areas, at a minimum:

- i Asset condition assessments
- ii Sustainable water supply and leakage management
- iii Investigations to inform forward capital works plans
- iv Wellington Water management fee

Context

3. Wellington Water provides Council with three waters advice, management and repair services against budgets provided through the Long-Term Planning process. Advising Council of issues and impacts that arise, which may impact on our ability to work within those budgets and provide agreed service levels is a vital part of our role as your service provider.
4. Our advice is developed in the context of the strategic investment priorities agreed with our owners and set out in our Statement of Intent. These priorities are maintaining existing infrastructure, supporting growth, ensuring a sustainable supply of drinking water, improving environmental water quality, reducing carbon emissions and increasing the resilience of services to the impacts of climate change. Funding decisions made for the FY 2021/31 LTP mean that only limited performance improvements will be achieved. The expected impact of the investment decisions and the residual risks are set out in the Regional Service Plan¹.
5. Council-owned three waters assets are ageing. This means they're not being renewed or replaced as quickly as they're wearing out, and that means increasing issues and outages. Over time, this results in higher reactive costs including maintenance, repairs, and renewals.
6. Over the past year Wellington Water has experienced significant increases in the costs of material and labour due to a variety of inflationary factors (inflation in the past financial year has reached over 7%). This has put pressure on the CAPEX and OPEX programmes Wellington Water is delivering on behalf of its client councils. Additionally, new information has been discovered through investigations and additional data analysis. For example, our leak management programme has given us a much better understanding of the extent of water loss across the network, and the impacts of that loss. These pressures mean OPEX investment at the FY 2023/24 LTP approved level will be insufficient to meet Council's level of service targets.
7. Wellington Water remains committed to assisting Council achieve its service level targets, but we are concerned that current agreed funding provided for provision of our services will not allow those targets to be achieved.

Summary of previous advice from Wellington Water

8. Council's approved LTP OPEX budget for the FY 2023/24 is \$23.537 million. This is less than the amount required to respond to all the strategic investment priorities.
9. In April 2022, we advised Council we were concerned that the 2023/24 agreed budget would not be sufficient to meet Council's required service level targets.
10. Table 1 illustrates the difference in approved LTP 2023/24 budget, and the budget Wellington Water advised in April 2022 was necessary. The recommended funding was \$26.021 million, or 9.5% higher than the budget amount.

¹ Available at <https://www.wellingtonwater.co.nz/publication-library/advice-and-work/regional-service-plan/>.

Table 1: Wellington Water advised budget versus LTP agreed budget (uninflated)

Activity (\$ x 1,000)	Recommended 2023/24 funding – April '22 advice	Council approved 2023/24 LTP funding	Difference
Treatment Plant	\$6,910	\$6,910	-
Planned maintenance	\$3,936	\$3,575	-\$363
Reactive maintenance	\$7,077	\$6,057	-\$1,020
Monitoring & investigations	\$4,301	\$3,200	-\$1,101
Operations	\$183	\$183	-
Management & advisory services	\$3,613	\$3,613	-
Totals	\$26,021	\$23,537	-\$2,484

Risks of keeping the FY2023/24 OPEX budget at the approved LTP level

11. In our April 2022 advice, we identified several risks associated with Council's approved OPEX budget. Many of these risks still stand, and some may have increased in likelihood and/or severity. In addition, new risks have been identified. This highlights that an OPEX budget above the approved LTP level is needed if Council intends to meet its level of service targets.
12. The following risks are identified and detailed below. All costs are yet to be determined and will be provided in advice we give Council in February 2023.
 - a Planned maintenance – completing critical planned maintenance is prudent asset management practice and allows for planned work on critical assets. The current level of investment in planned maintenance will mean the frequency of stormwater network flushing and drinking water network maintenance such as hydrant flushing, and valve maintenance will reduce. This will increase the risk of blockages and overflows reoccurring, with poor environmental outcomes. A lower level of planned drinking water maintenance carries a risk that hydrants and valves will not operate reliably when needed. As mentioned, these maintenance reductions place additional pressure on reactive maintenance budgets. There also remains a risk that underinvestment in pump station maintenance will result in significant issues, as there is no allowance for increasing maintenance costs, for the rising number of failures or the ability to address deferred maintenance issues.
 - b Reactive maintenance is considerably below the level of expenditure required. It will result in a reduction in levels of service in response times and low priority faults not being addressed.
 - c Sustainable water supply and leakage management – gross water consumption over the first quarter of FY23 for the Wellington metropolitan area averaged 2.9% higher than the corresponding time last year and 7.0% above our 5-year target. All networks are performing poorly based on standardised water loss metrics, with Hutt City Council sitting in the “poor” infrastructure leakage index (ILI) category. Minimum night flows and water balance analyses, climate and population correction modelling, and analysis of dry weather wastewater flows all indicate that leakage is the primary driver of rising demand. A full programme of mitigation measures has been developed and prioritised; however, Wellington Water requires additional OPEX funding from Hutt City Council of an estimated \$1.2m to support these measures. The leak repair programme that was funded through

stimulus funding in FY2020/21 and FY2021/22 is no longer funded. This means there is insufficient funding to make a significant impact on water loss and demand. Water use in metropolitan Wellington is now at an all-time high, and it is important to continue to prioritise leak detections and repair as an important tool for managing water loss. Without additional funding, the leak issue and overall consumption will continue to increase, negating recent gains and putting even greater stress on the water supply for the region. As a result, there is an increased likelihood of level 3 or higher water restrictions being needed to control demand this summer. If Level 3 or 4 restrictions are required, then mayors will need to lead and support communications.

- d Wellington Water has advised the Water Committee it is prioritising leak detection and remediation in response to significantly increased water usage over the 2022 winter. We expect Council will also prioritise this activity, though the underfunding we have identified will significantly impede Council's ability to contribute to this region-wide initiative. Reduced leak detection will likely also see water consumption continue to rise and community engagement in conservation decrease. The leak repair programme that was funded through stimulus funding in FY2020/21 and 2021/22 is no longer funded. This means there is insufficient funding to repair the leaks that have been identified.
- e Investigations - Reducing general investigations limits the ability to identify and resolve service issues, potentially resulting in ongoing customer and environmental impacts and places a constraint on preparing forward capital works plans.
- f Very High Criticality Assets (VHCA) – between June 2020 and July 2022 Wellington Water completed a condition assessment project to identify VHCA assets. While there is always risk of assets failing unexpectedly, the VHCA programme has significantly improved our understanding of the condition of those assets assessed. Assets identified as requiring remedial actions will need to be funded to prevent unplanned failures. Additional investment in ongoing condition assessment work is strongly recommended to ensure reliable operation of the networks.
 - i Historically, planned maintenance on reservoirs has been limited by very constrained budgets. The VHCA and Water Safety Planning programmes highlighted the need to review the planned maintenance budgets to adequately mitigate contamination risk for reservoirs. The VHCA programme confirmed that contamination risks have surfaced through lack of regular inspection of these reservoirs. An additional \$560k is required to clean and undertake inspections and maintenance of Council reservoirs to mitigate contamination risks.
- g Backflow prevention – a regionally consistent backflow prevention policy and programme is being implemented to ensure Wellington Water meets the requirements of the Water Services Act 2021 and Taumata Arowai's expectations. Without a single regional policy and backflow prevention programme in place for all councils, there is a risk that water supplied to customers becomes contaminated within council networks due to activities within private property, potentially causing widespread illness or death. For HCC, it is estimated that \$25k is required annually to complete surveys and inspections to understand the contamination risks of all unknown, medium, and high-risk properties in Council's area and the current status/suitability of boundary devices to protect the public network.
- h Asset register – all activities that Wellington Water performs for Council rely on a complete and accurate asset register. Stimulus funding enabled good progress on fixing long standing issues with the asset register; the VHCA Programme identified VHCA assets and assessed their condition, and in-roads were made on asset data and information processing backlogs. Council allocated some funding for ongoing condition assessment work in the

approved FY 2023/24 LTP and has recently provided additional funding for asset data completeness and quality work. In both areas ongoing funding is required and further increases in funding will enable Wellington Water to accelerate work and enable positive impacts on service provision. This work also contributes to the National Transition Unit understanding the full complement of assets Council currently owns (providing a complete asset valuation) and supporting smooth transition of services to the new Water Services Entity, thus benefitting Hutt City residents.

- i Labour costs – since the 2021 LTP budgets were agreed, labour costs have increased. This is largely due to current skill shortages in New Zealand resulting in increased demand for subcontractors/contractors in place of permanent staff. We are expecting significant increases in remuneration of subcontractor work. This will have an overall impact on the cost of completing work, particularly for reactive maintenance.
- j Growth studies – undertaking growth planning studies in FY2023/24 will help inform the capital delivery programme that will be developed for the 2024-34 LTP. We will continue to work with Council to ascertain whether Council wishes for this work to be undertaken. We estimate \$100k is required for consultant support to complete Council’s current growth studies.
- k Wellington Water management fee – Wellington Water is absorbing additional management costs in FY2023 and will continue to bear the cost in FY2024 if additional funding is not made available. The key reasons for the increasing management fee are:
 - i inflation running at a higher rate than forecast when developing the LTP
 - ii an increase in wages to match market rates and an increase in the proportion of contractors and consultants being used across the industry, and
 - iii increases in staff numbers due to the larger CAPEX and OPEX programmes Wellington Water is delivering, and an increased regulation and compliance activity.

The Wellington Water management fee is charged proportionally across all councils. For HCC, this means that in FY 2023/24 we require an increase of \$372k from the FY 2023/24 LTP budget, to cover the management costs absorbed by Wellington Water to date and to sustain our core business functions. If additional funding cannot be secured from Council to accommodate this year-on-year uplift, Wellington Water will need to reallocate funds from other OPEX budgets to make up for the deficit in management fee. This will further impede Council’s ability to achieve its service level targets. It is also worth noting that the management fee is covering some internal staff time costs for work required to be undertaken by Wellington Water to prepare and support the transition to the new Water Services Entity. However, most of these costs are being met from the additional funding that Council is providing out of DIA’s Transition Support Funding.

In addition, under the Government funded stimulus programme we made progress on understanding and mitigating immediate cyber security risks across the water network. The Department of Internal Affairs approved stimulus funding for this work to be carried through to FY22/23. Wellington Water requires ongoing investment from Council in cyber security in FY23/24 to continue risk mitigation. Note, at the time the 2021-31 LTP was developed, we did not know the extent of work required for cyber security, and associated ongoing costs, hence the reason this programme has not been budgeted for beyond FY2022/23. At a minimum, ongoing funding of current cyber security activity needs to continue. Split proportionately across councils, this equates to \$74k being requested from Hutt City council to continue with current cyber security measures. The actual budget needed will be higher

than this as cyber security threats change, and we gain greater understanding of the detail of our current security risk.

In total, the updated management fee is \$4.16m including the increase of \$372k in management costs, and the additional funds requested for cyber security activity.

Next steps

13. We will continue to work on your OPEX needs over the coming months and provide detailed OPEX budget advice to Council in February 2023. In the February advice, Wellington Water will recommend Council increase its FY2023/24 OPEX budget above the approved LTP level.
14. In parallel to providing Council's OPEX Annual Plan advice, we are also determining a 10-year unconstrained OPEX forecast for Council, for submission to the National Transition Unit. This information is due in early December 2022.
15. We are committed to working with you and are keen to meet to discuss the content of this memo when suits.

██████████

GM Network Strategy & Planning

Ph: ██████████

██████████ [@wellingtonwater.co.nz](mailto:██████████@wellingtonwater.co.nz)

Advice to Hutt City Council (HCC) Regarding Three Waters Operating Expenditure for the 2023/24 Annual Plan

TO [REDACTED], Strategic Advisor, Hutt City Council

COPIED TO [REDACTED], Manager Service Planning, Wellington Water; [REDACTED], General Manager Customer Operations, Wellington Water

FROM [REDACTED], Group Manager Network Strategy & Planning, Wellington Water

DATE 2 December 2022

Action sought

	Action sought	Deadline
[REDACTED] Strategic Advisor, Hutt City Council	Note and respond to the recommendations in this paper	13 January 2023

Contact for telephone discussion (if required)

Name	Position		1st Contact
[REDACTED]	Group Manager Network Strategy & Planning, Wellington Water	[REDACTED]	
[REDACTED]	Manager Service Planning, Wellington Water	[REDACTED]	✓

Purpose

1. This paper advises Hutt City Council (Council) on Wellington Water Limited's operating expenditure (OPEX) budget for the FY2023/24 Annual Plan. It advances our previous advice to Council dated 4 November 2022.

Recommended action

2. It is recommended that Council:
 - a. **note** that Hutt City Council's confirmed OPEX investment in Three Waters is \$23.54m for the 2023/24 financial year;
 - b. **note** Wellington Water recommends an OPEX budget of \$29.24m is needed for FY2023/24 to meet current levels of service.

- c. **agree** to:

EITHER

- i. proportionally increase OPEX funding across all investment categories with priority, at a minimum, on the following activities:
 - I. Asset condition assessments
 - II. Sustainable Water Supply and Demand and leakage management
 - III. Investigations to inform forward capital works plans
 - IV. Wellington Water management fee including cyber security; and
- ii. accept that a budget below \$29.24m will result in reduced levels of service of Council assets;

OR

- i. increase Wellington Water's OPEX funding for FY2023/24 by \$5.7m to a total OPEX budget of \$29.24m;
- d. **advise** Wellington Water of the process, including the impacts of our advice on Council's Significance and Engagement Policy, timeframes and any further information needed to support progressing the development of Council's Annual Plan;
- e. **meet** with Wellington Water to discuss the content of this paper to agree appropriate funding levels within Council's financial constraints; and
- f. **note** that this advice will be released and published on Wellington Water's website within 30 working days of being sent to Council.

Context and key messages

3. In our preliminary advice to you dated 4 November 2022 (*'Preliminary Three Waters 2023/24 Annual Plan OPEX advice for Hutt City Council'*) we signalled risks with keeping Council's OPEX budget at the current LTP approved level. We also noted possible OPEX cost increases to address those risks, where known.
4. Following further analysis, we now have a better understanding of the OPEX budget required for FY2023/24. Wellington Water recommends \$29.24m is needed to maintain and operate Council's Three Waters assets in FY2023/24.
5. We acknowledge this is a sizeable step-up from Council's approved LTP budget. We appreciate that Council will be facing financial pressures across all its budgets and any increase in funding to Wellington Water will need to be considered alongside other Council priorities.
6. The OPEX budget proposed by Wellington Water reflects the funding required to deliver existing levels of service. In the situation where an OPEX budget is approved below the amount proposed, we would welcome a conversation with Council to confirm priorities and the trade-offs in levels of service.

Hutt City Council's Three Waters Operating Investment

Wellington Water's recommended OPEX budget for the 2023/24 financial year is \$23.537m

7. Table 1 below outlines Wellington Water's recommended changes to our approved OPEX budget for FY2023/24. Advice on our proposed CAPEX budgets will be provided separately in early 2023.

Table 1: Summary of proposed operational expenditure for FY2023/24 by investment category

Investment category (\$ x 1,000)	FY23 Budget	Council approved 2023/24 LTP funding	2023/24 recommended budget	Recommended increase above LTP approved budget
Treatment Plant	6,540	6,910	7,800	890
Planned maintenance	2,792	3,575	3,984	410
Reactive maintenance	5,844	6,057	8,161	2,104
Monitoring and investigations	4,234	3,200	4,901	1,701
Operations	200	183	228	46
Management and advisory services	3,354	3,613	4,164	551
TOTAL	22,964	23,538	29,238	5,702

8. Consistent with industry-wide trends, Wellington Water is seeing significant cost increases across all activities within its service delivery portfolio. Cost increases associated with higher labour, consultant/contractor and material costs as well as growth factors and rising demand for water have contributed to the budget shifts across all investment categories in Table 1. Additional factors driving changes within specific investment categories are summarised below.

Treatment plants

9. The Treatment Plant investment category, groups all activities relating to the operation of treatment plants, planned and reactive maintenance. The OPEX budgets for all other activities delivered by Wellington Water are separated under the relevant investment category.
10. The recommended budget uplift, in addition to general inflation factors, reflects expected cost increases due to:
 - higher gas and electricity tariffs – the contracts for power and gas will expire in 2023. We have budgeted a 15% increase for FY2023/2024.
 - sludge disposal costs to landfill are increasing by 12.5% in FY2023/2024
 - increased outfall pipe maintenance – the frequency of unplanned maintenance to the Seaview outfall pipe has increased. On average, outfall maintenance costs have been in the order of \$130,000 per incident. We have budgeted an allowance for two incidents in FY2023/24
 - variation in the contract with the Plant Manager Veolia.

Planned maintenance

11. A large proportion of the recommended uplift is due to inflation and higher costs for goods and services. In addition, growth and water demand is putting pressure on maintenance programmes to ensure pump stations and other assets across the network are being maintained to required operational service levels.

Reactive maintenance

12. Existing funding is insufficient to meet customer requirements, therefore the recommended budget supports Wellington Water to increase activity to meet target service levels. In addition, significant cost increases associated with higher labour, consultant/contractor and material costs are contributing to the uplift recommended for reactive maintenance.
13. We know that capital investment is insufficient to address the backlog of pipe renewals, as such the network is continuing to age and increased levels of failure and repairs are expected. Budget uplift is recommended to meet forecast reactive maintenance costs across your Three Waters infrastructure with a large proportion to stormwater and potable water network maintenance which includes leak repairs. We support Council's early signals to Wellington Water that reactive maintenance including leakage management is a priority for any additional budget funding.
14. Alternatively, if additional budget is not available or to the level recommended, we advise agreeing to amend target levels of service to increase response times and reduce delivery of lower priority reactive maintenance.

Monitoring and investigations

15. The recommended increase is largely due to the following key work areas:

- Condition assessment – as previously signalled, we have made good progress on completing Very High Criticality Assets (VHCA) condition assessments. We are recommending an uplift of \$729k to complete condition assessment on High Criticality Assets (HCA) assets, physical pipe inspections, testing of critical pumps, wastewater treatment plant pump and blower performance testing and the development of pump station asset management documents. The additional funding for condition assessment activities accounts for 42% of the Monitoring and Investigation uplift requested. As a priority, we strongly advise ongoing funding in condition assessments, including for non-VHCA, to further improve understanding of Council’s assets and to identify where remedial action is needed to minimise unplanned failures.
 - Investigations, including for the Hutt Valley Joint Venture trunk mains; to meet increased levels of service for the Active Leak Control Programme; resilience, fireflow, pressure management, and reservoir structural assessments; wastewater overflow reduction and the frequency. We recommend an uplift in funding of 23% in investigations to help inform forward capital programmes as a priority.
16. Also accounting for the uplift is increased laboratory costs and new sampling programmes required to meet changing water regulation and new resource consent requirements.

Operations

17. The uplift recommended is for preventative maintenance activities across Council’s stormwater, wastewater, and potable water asset control systems. It is important these systems are operational for controlling and monitoring the Council’s treatment plant, pump station, flow meter, and valve assets.

Management and advisory services

18. The higher management costs we have been experiencing in FY2022/23 due to higher inflation rates, wage growth consistent with market rates, a higher proportion of contractors and consultants being used across the industry, and increased staff numbers to deliver larger CAPEX and OPEX programmes, are trending to continue through FY2023/24.
19. In addition to the general cost increases, ongoing funding for cyber security activity is needed. No specific funding for cyber security was provided in the approved LTP. Therefore, this programme has not been budgeted for beyond FY2022/23. Cyber risk is growing globally. As an organisation delivering essential infrastructure services, it is vital investment is made to protect against cyber-attack.
20. We endorse Council’s early signals to Wellington Water that management and advisory services (including cyber security) is a priority for budget uplift.

Sustainable water supply

21. We strongly recommend as a priority, consistent with Council’s early signals, increased investment in Sustainable Water Supply activities. These activities are important to: help ensure water is available to support economic, social, and cultural wellbeing; improve efficiency of supply across the network; and improve environmental outcomes.
22. The costs for Sustainable Water Supply activities are split across the proposed planned maintenance, reactive maintenance, operations and monitoring and investigation budgets outlined above. In total this represents \$575k of the total recommended budget.

Next steps

23. Please provide a response to the recommendations in this paper to [REDACTED] by 13 January 2023.
24. Following your response to this report and any discussion meeting, Wellington Water will proceed to deliver services within agreed budgets.

Advice to Hutt City Council (HCC) Regarding Three Waters Capital Expenditure for the 2023/24 Annual Plan

TO [REDACTED], Strategic Advisor, Hutt City Council

COPIED TO [REDACTED], Manager Service Planning, Wellington Water; [REDACTED], General Manager Customer Operations, Wellington Water

FROM [REDACTED], General Manager Network Strategy & Planning, Wellington Water

DATE 02 February 2023

Purpose

1. This paper advises Hutt City Council (Council) on the level of capital expenditure (CAPEX) Wellington Water Limited recommends that Council budgets for in the FY2023/24 Annual Plan. It advances our previous advice to Council dated 2 December 2022 but is not the full CAPEX advice Wellington Water will provide to Council. Further analysis is required to confirm the final capital delivery programme Wellington Water will recommend Council adopt in FY2023/24 and FY2024/25. This full advice will be provided in late February 2023.

Recommended action

2. It is recommended that Council:
 - a. **agree** to continue enabling growth in the three waters capital delivery programme by approving a budget for the 2023/24 financial year of \$65m-\$68m. This budget is above the forecast expenditure for the 2022/23 financial year (\$60m)
 - b. **agree** to increase the total CAPEX budget available for the three-year 2021/24 Long Term Plan (LTP) to \$154-\$157m, which is \$3m-\$6m above the currently approved budget.
 - c. **notes** that this advice will be released and published on Wellington Water's website within 30 working days of being sent to Council.

Context and key messages

3. In our preliminary advice to you dated 4 November 2022 ('WWL Preliminary Y3&4 Capital Delivery advice to HCC_Nov 22') we requested Council provide a capital budget of \$85.5m in FY2023/24. This aligned with the information provided to Wellington Water from Council on 20 October 2022. This assumed that approximately \$20m would be brought forward to enable funding of additional investment, increasing this year's budget from \$41.8m to \$60m which is at the top of the delivery range of (\$42m-60m).

4. In subsequent advice to you dated 2 December 2022 (*Feb 2022 WWL CAPEX Advice to Hutt City Council*) we confirmed we are seeking a CAPEX budget of between \$65-68m for FY2023/24.
5. The budget of \$65-68m for FY2023/24 reflects a level of investment we believe is deliverable within the Capital programme in FY2023/24. It includes approximately \$45m of projects that are on track to have contracts awarded by the end of June 2023, for example the Avalon Wastewater Catchment Renewals Programme.
6. We will target a total value of the programme for FY2023/24 of ~120% of the proposed budget. This over-programming against the proposed budget is purposely introduced to mitigate delivery risks and optimism bias in delivery capacity.
7. Table 1 illustrates the proposed FY2023/24 overprogrammed CAPEX expenditure by water type and Local Government Act (LGA) criteria. As mentioned, this overprogrammed is an interim update and full advice will be provided in late February 2023.

Table 1: Summary of proposed Overprogrammed expenditure for FY2023/24 by water and investment category (\$000)

Water	Investment Category	FY2023/24 WWL Recommended Overprogrammed Budgeted (\$000s)
Drinking Water	Growth	6,025
	Level of Service	2,110
	Renewal	14,940
	Total	23,075
Stormwater	Growth	350
	Level of Service	3,193
	Renewal	6,947
	Total	10,490
Wastewater	Growth	188
	Level of Service	415
	Renewal	28,640
	Total	29,243
Wastewater JV	Level of Service	2,410
	Renewal	12,960
	Total	15,370
Total		78,177

8. Appendix A provides a detailed list of the projects that make up Council's interim overprogrammed FY2023/24 CAPEX programme.
9. Table 1 and Appendix A, illustrate that a significant portion of the FY2023/24 programme is recommended to be in renewals activity. Investment in renewals reduces the risk of asset failures and has positive flow on effects to future maintenance budgets. Increasing CAPEX investment in FY2023/24 provides an opportunity to address Councils growing backlog in renewals projects.

Sustainably growing the CAPEX programme

10. As noted in our previous advice, Wellington Water has been working on sustainably growing the CAPEX programme over the past few years. The proposed budget of \$65-\$68m for FY2023/24 follows this growth model:
 - 2021/22 expenditure = \$29m
 - 2022/23 risk adjusted forecast expenditure = \$60m
 - 2023/24 proposed expenditure = \$65-68m
11. Council's total 3-year LTP budget is \$151m. A FY2023/24 budget between \$65-68m exceeds Councils' 3-year budget by between \$3m-\$6m (total 3-year programme budget of \$154-\$157m).
12. It's important we continue to provide greater certainty to the market of ongoing investment in three waters into the future. We are seeing the contractor market ramp up resourcing for delivery in three waters and growing the level of investment year on year is an important part of this. Signalling sustained growth in investment will provide stability in the market and reduce the risk of contractors shifting to other large-scale programmes such as transport and housing which also have growing CAPEX programmes.

Appendix A: Interim FY2023/24 Programme

Water	LGA Classification	Project Name	Budget
Drinking Water	Growth	Naenae No 2 Reservoir and Outlet Main	6,000,000
Drinking Water	Growth	Drinking water development projects – reactive	25,000
Drinking Water	Level of Service	HCC Management of Fire Hydrant Use	650,000
Drinking Water	Level of Service	Kingsley Reservoir Seismic replacement	500,000
Drinking Water	Level of Service	District Meter Area (DMA) meter fleet	250,000
Drinking Water	Level of Service	Point Howard to Lowry Bay Link Main	200,000
Drinking Water	Level of Service	HCC Firefighting upgrades - Hutt Valley Floor	100,000
Drinking Water	Level of Service	Critical Pipelines Seismic Upgrade - Maungaraki Reservoir inlet main	88,128
Drinking Water	Level of Service	City pump stations seismic strengthening programme - provisional subject to further assessment	60,000
Drinking Water	Level of Service	Critical Pipelines Seismic Upgrade - Myrtle St	45,464
Drinking Water	Level of Service	Critical Pipelines Seismic Upgrade - Major Drive	41,645
Drinking Water	Level of Service	HCC Modelling - Potable Water Network	40,000
Drinking Water	Level of Service	HCC Firefighting upgrades - Wainuiomata	39,706



Drinking Water	Level of Service	Critical Pipelines Seismic Upgrade - Hutt Road	33,696
Drinking Water	Level of Service	Sweetacres Watermain Upgrade + PRV + meter	21,082
Drinking Water	Level of Service	Naenae Reservoir - Water Safety	20,000
Drinking Water	Level of Service	Naenae Reservoir overflow extension	13,824
Drinking Water	Level of Service	HCC Authorised Tanker Fill Points	6,000
Drinking Water	Renewal	HCC Water Main Renewals	7,000,000
Drinking Water	Renewal	Wainuiomata Water Supply Renewals 21 - 22	4,000,000
Drinking Water	Renewal	Ava Street Water Main Renewal	2,000,000
Drinking Water	Renewal	Closing Bulk Water Cross Connections - Rata and Sunville Rezoning	1,100,000
Drinking Water	Renewal	HCC Reservoir VHCA Remedial Works	600,000
Drinking Water	Renewal	Waddington Drive (Naenae Road to Seddon to Rata Street) water main renewal	200,000
Drinking Water	Renewal	Copeland Street and Oxford Terrace – Critical Pipelines Seismic Upgrade	20,000
Drinking Water	Renewal	Wilkie Cres Watermains Renewal and Upgrade	20,000
Stormwater	Growth	Riverlink Woburn Stormwater Pipeline	100,000
Stormwater	Growth	Black Creek improvements - A	50,000
Stormwater	Growth	Marsden St Pump Station, Marsden St & Bridge St Upgrade	50,000

Stormwater	Growth	Riverlink Melling Stormwater Pipeline	50,000
Stormwater	Growth	William St Pump Station and South St Upgrade	50,000
Stormwater	Growth	Woburn + Riddiford St SW Diversion	50,000
Stormwater	Level of Service	Muritai Rd (92-96) Rona St, Marine Parade (19) Stormwater Upgrades	2,500,000
Stormwater	Level of Service	HCC Stormwater Network Modelling	200,000
Stormwater	Level of Service	HCC Stormwater Management Strategy	150,000
Stormwater	Level of Service	Network discharges programme: subcatchment stormwater management plan	110,000
Stormwater	Level of Service	Freshwater Management tool - Build	100,000
Stormwater	Level of Service	SP3-1 - CAPEX SW quality: Green Infrastructure Delivery	23,333
Stormwater	Level of Service	DC3 - CAPEX SW quality: Restoring and/or daylighting natural channels.	20,000
Stormwater	Level of Service	OM4-1 - CAPEX SW quality: Condition assessments Programme	20,000
Stormwater	Level of Service	SP7-1 - CAPEX SW quality: Leading by Example	20,000
Stormwater	Level of Service	Wellesley College stream inlet and outlet erosion protection	20,000
Stormwater	Level of Service	HCC Global consent for operations and maintenance works in streams	15,000
Stormwater	Level of Service	DC1 - CAPEX SW quality: Stormwater Catchment Management Plan (SCaMP) Programme	14,400
Stormwater	Renewal	Knights Road - Colin Grove E Coli - Stormwater	3,500,000

Stormwater	Renewal	Jackson Street Stormwater Renewals	2,600,000
Stormwater	Renewal	Te Mome Pump Station Renewal and Optimisation	700,000
Stormwater	Renewal	VHCA - Horlor St to Pilcher Cres SW Renewal	119,045
Stormwater	Renewal	VHCA - 427 Hutt Road SW Renewal	27,962
Wastewater	Growth	Beaumont Ave WW pump station connection / storage tank	50,000
Wastewater	Growth	Lower Hutt CBD Wastewater (excl JV) Bypass	50,000
Wastewater	Growth	Seaview Wastewater (excl JV) Treatment Plant storage	50,000
Wastewater	Growth	Fleet St WW storage	28,000
Wastewater	Growth	Wastewater (excl JV) development projects reactive	10,000
Wastewater	Level of Service	HCC Wastewater Model	150,000
Wastewater	Level of Service	Epuni and Woburn WW Network Upgrades	150,000
Wastewater	Level of Service	Resource consent wet weather waste water network overflows - consequential	100,000
Wastewater	Level of Service	Resource consent dry weather waste water network blockages	15,000
Wastewater	Renewal	Avalon WW Renewals Programme 21-22	12,000,000
Wastewater	Renewal	Knights Road - Colin Grove E Coli - Wastewater	5,500,000
Wastewater	Renewal	Gracefield Wastewater Renewals	4,000,000

Wastewater	Renewal	Wainuiomata Wastewater Renewals 21-22	3,000,000
Wastewater	Renewal	Seaview WWTP Sludge Dryer	2,000,000
Wastewater	Renewal	Wainui Road and Rishworth Street Sewer Renewals	1,100,000
Wastewater	Renewal	Seaview WWTP Outfall	1,000,000
Wastewater	Renewal	Naenae Sewer Renewals - Wilkie Swainson & Grierson Seddon St	20,000
Wastewater	Renewal	Bell Road	20,000
Wastewater JV	Level of Service	Seaview WWTP Wastewater Storage	1,900,000
Wastewater JV	Level of Service	Seaview Backup Power Supply Project	200,000
Wastewater JV	Level of Service	Seaview WWTP Process Model Development	200,000
Wastewater JV	Level of Service	Network discharges programme: pilot subcatchment wastewater wet weather overflows reduction plan	110,000
Wastewater JV	Renewal	Trunk Type B Network Development - Petone Collecting Wastewater Upgrade	5,000,000
Wastewater JV	Renewal	Seaview WWTP Biological Treatment Process Automation	5,000,000
Wastewater JV	Renewal	Seaview Dryer Replacement	2,000,000
Wastewater JV	Renewal	Seaview UV Renewal Project	500,000
Wastewater JV	Renewal	Trunk Type B Network Development - Barber Grove to Wastewater Treatment Plant Duplication	160,000
Wastewater JV	Renewal	Seaview WWTP Main Outfall Renewal (on hold as of Oct 22)	100,000



Wastewater JV	Renewal	VHCA-Rising Main PS241	80,000
Wastewater JV	Renewal	Seaview WWTP Consent Renewal	50,000
Wastewater JV	Renewal	Seaview WWTP Spares	50,000
Wastewater JV	Renewal	Seaview Odour Control Modification/Upgrade	20,000
Total			78,177,284

Supplementary advice to Hutt City Council regarding Three Waters Operating Expenditure for the 2023/24 Annual Plan

TO [REDACTED], Strategic Advisor, Hutt City Council

COPIED TO [REDACTED], Manager Service Planning, Wellington Water; [REDACTED] General Manager Customer Operations, Wellington Water; [REDACTED], Group Chief Financial Officer, Hutt City Council

FROM [REDACTED], Group Manager Network Strategy & Planning, Wellington Water

DATE 2 February 2023

Action sought

	Action sought	Deadline
[REDACTED] Strategic Advisor, Hutt City Council	Note the contents of this paper	None

Contact for telephone discussion (if required)

Name	Position		1st Contact
[REDACTED]	Group Manager Network Strategy & Planning, Wellington Water	[REDACTED]	
[REDACTED]	Manager Service Planning, Wellington	[REDACTED]	x

Purpose

1. This paper provides supporting detail requested by the Hutt City Council (the Council) on the recommended increases to Wellington Water Limited's operating expenditure (OPEX) budget for the FY2023/2024 Annual Plan. It updates the earlier advice to Council dated 2 December 2022 (*'Advice to Hutt City Council (HCC) Regarding Three Waters Operating Expenditure for the 2023/24 Annual Plan'*).

Recommended action

2. It is recommended that Council:
 - a. **note** that Hutt City Council's confirmed OPEX investment in Three Waters is \$25.602m for inclusion in the 2023/24 draft Annual Plan for public consultation including the \$1.490m uplift approved by Council on 20 December 2022;
 - b. **note** that Wellington Water recommends an OPEX budget of \$29.974m is needed for FY2023/24 to meet current levels of service and that a budget below this level will result in a reduction in the level of service provided for Council assets;
 - c. **agree** to increase the FY2023/24 OPEX budget above \$25.602m;
 - d. **advise** Wellington Water of the process, including the impacts of our advice on Council's Significance and Engagement Policy, timeframes and any further information needed to support progressing the development of Council's Annual Plan and the associated Council public consultation process; and
 - e. **note** that this advice will be proactively released and published on Wellington Water's public website, subject to any redactions consistent with the Local Government Official Information and Meetings Act 1987, within 30 working days of being sent to Council.

Background

3. In our preliminary advice to you dated 4 November 2022 (*'Preliminary Three Waters 2023/24 Annual Plan OPEX advice for Hutt City Council'*) we signalled risks with keeping Council's OPEX budget at the current Long Term Plan (LTP) approved level. We also noted possible OPEX cost increases to address those risks, where known.
4. Our 2 December 2022 advice provided an update and included recommendations on the level of OPEX we considered necessary to maintain and operate Council's Three Waters assets in FY2023/24.
5. On 12 January 2023, staff from Wellington Water Limited met with Council officers to discuss our advice. Council officers requested Wellington Water provide additional rationale to support our proposed budget increases above approved levels. This paper seeks to provide that detail and also updates some of the figures previously provided to reflect further information that has since become available including the additional funding of \$1.490m approved by Council on 20 December 2022.

Wellington Water's recommended Three Waters Operating Investment

Wellington Water's recommended OPEX budget for the 2023/24 financial year is \$29.974m

6. Table 1 provides a breakdown of Wellington Water's recommended changes to the allocated OPEX budget for FY2023/24 by water type.

Table 1: Summary of proposed operational expenditure for FY2023/24 by water and investment category (\$000)

Water Type	Investment Category	Current Approved Budget FY22/23	FY23/24 LTP Budget	FY23/24 Proposed budget	Variance FY23/24 LTP vs FY23/24 Proposed budget	Variance FY23/24 LTP vs FY23/24 Proposed budget (%)
Drinking Water (DW)	Monitoring & Investigations	1,736	1,578	2,014	436	28%
	Operations	56	55	66	11	20%
	Planned Maintenance	923	1,205	1,564	359	30%
	Reactive Maintenance	3,055	3,788	4,927	1139	30%
DW Total		5,769	6,626	8,571	1,944	29%
Stormwater (SW)	Monitoring & Investigations	977	635	965	330	52%
	Operations	26	26	30	4	15%
	Planned Maintenance	770	781	1,025	245	31%
	Reactive Maintenance	759	699	975	276	39%
SW Total		2,532	2,141	2,995	854	40%
Wastewater (WW)	Monitoring & Investigations	1,237	1,276	1,655	379	30%
	Operations	98	107	110	3	3%
	Planned Maintenance	598	672	749	77	11%
	Reactive Maintenance	1,664	1,538	1,665	127	8%
	Treatment Plant	344	315	249	(65)	(21%)
WW Total		3,941	3,907	4,428	520	13%
Wastewater Joint Venture (WWJV)	Monitoring & Investigations	2847	231	435	203	88%
	Operations	20	20	23	3	15%
	Planned Maintenance	501	867	646	(221)	(25%)
	Reactive Maintenance	366	500	593	93	19%
	Treatment Plant	6,197	7,002	8,119	1,117	16%
WWJV Total		7,367	8,620	9,816	1,196	14%
Management Total	Management and Advisory Services	3,354	4,308	4,164	(144)	(3%)
Grand Total		22,963	25,602	29,974	4,372	17%

7. Since our advice of 2 December 2022, further information has become available resulting in an additional \$0.736m to be proposed over our recommended budget of \$29.238m. This is due to:
 - changes to the power estimate within the Treatment Plant investment category (additional \$0.569m); and
 - the omission of budget in FY2023/24 for the continued development of the asset register within the Monitoring and Investigations investment category (additional \$0.167m).
8. Detail on these changes as well as the drivers and rationale for the budgets proposed in Table 1, the relative priorities of expenditure, and potential risks from lower levels of investment are outlined in the following sections.

Investment prioritisation

9. Some activities within the proposed OPEX budget are considered unavoidable and will need to be covered by Council. These costs relate to activities that are mandatory or cannot be avoided or deferred as they are essential for the operation and maintenance of Councils assets. For example,

costs required for the day-to-day operation of critical services where the consequence of failure is very high or for maintaining compliance with legislation, regulation, or industry standards.

10. In the following sections we have highlighted the costs Wellington Water advises are unavoidable where this is currently known. However, it is important to note that there may be additional unavoidable costs that have not been specifically identified. Wellington Water therefore strongly recommends against increasing OPEX budgets to only address the known unavoidable costs.
11. Wellington Water strongly recommends that the proposed budget for the following investment categories is imperative for delivering these essential services:
 - Treatment Plants
 - Operations
 - Monitoring
 - Management & Advisory Services.
12. It is possible the budgets for the Planned Maintenance, Reactive Maintenance, and Investigations investment categories could be reduced by making strategic decisions to discontinue or reduce certain activities. However, this comes with increased risks to service delivery. These risks are explained further in the following sections.

General factors contributing to budget increases across all investment categories

13. Consistent with industry-wide trends, Wellington Water is seeing significant cost increases across all activities within its service delivery portfolio. Cost increases associated with higher labour, consultant/contractor and material costs as well as growth factors and rising demand for water have contributed to the budget shifts across all investment categories in Table 1. Additional factors driving changes within specific investment categories are summarised in the relevant sections below.
14. To accurately reflect current market conditions, a 10% increase has been applied to labour and plant allocations across all water types and investment categories. This adjustment considers the impact of inflation, which was lower at the time when LTP budgets were initially set. This adjustment will ensure that resources are allocated in a manner that is consistent with current economic conditions.

Monitoring and Investigations

15. The monitoring and investigations investment category includes activities such as condition assessments, resource consent compliance monitoring, water sampling and monitoring, investigations, design studies, asset management, and the development of an asset register which was not accounted for in our 2 December 2022 advice.
16. A total budget of \$5.069m is recommended to meet forecast monitoring and investigations costs. This is an uplift of \$1.349m over the FY2023/24 LTP allocated budget of \$3.720m. Table 2 below provides the breakdown of the recommended budget by water type.

Table 2: Summary of proposed Monitoring and Investigations OPEX for FY2023/24 by water type

Investment Category (\$000s)	Water Type	2023/24 LTP Budget	2023/24 Proposed Budget	Increase above LTP Budget
Monitoring & Investigations	Drinking Water	1,578	2,014	436
	Stormwater	635	965	330
	Wastewater	1,276	1,655	379
	Wastewater Joint Venture	231	435	204
	Total	3,720	5,069	1,349

17. The recommended increase to the Monitoring and Investigations investment category is for:
- investigations, including for inflow and infiltration studies to drive water quality, stormwater network and catchment master plans, growth modelling, an overflow strategy, and a flood management strategy; the Hutt Valley Joint Venture trunk mains; to meet increased levels of service for the Active Leak Control Programme; resilience, fireflow, pressure management, and reservoir structural assessments; and wastewater overflow reduction and frequency
 - condition assessments – to complete condition assessment on High Criticality Assets (HCA) assets, physical pipe inspections, testing of critical pumps, wastewater treatment plant pump and blower performance testing and the development of pump station asset management documents
 - increased laboratory costs and new sampling programmes required to meet changing water regulation and new resource consent requirements.
18. The Monitoring and Investigations investment category contains some unavoidable costs for activities already committed or to meet statutory requirements.
19. Of the \$0.960m recommended budget for monitoring activities within the Monitoring and Investigations investment category, most is considered unavoidable costs required to undertake sampling and testing activity, or monitoring to meet consent requirements. This also covers HCC's share of software which had not previously been budgeted for.
20. Within the investigations activities, approximately \$1.790m could be deferred. However, this comes with risks. The following activities account for most of the investment expenditure in this investment category. The risks of not providing sufficient budget for these in FY2023/24 are noted below.
- General investigations account \$1.456m of the recommended Monitoring and Investigations budget. These investigations include a mix of unavoidable activity, and activity that could be deferred, depending on their association with compliance to safety regulations. The risks of not funding these items are varied, but mainly relate to significantly limiting WWL's ability to understand the life and condition of assets, and the ability to prepare for future climate change (modelling), to report emission reductions, and to understand how we can achieve 2050 emissions targets.
- A reduction in the investigations budget would result in renewals investigations being deferred. This would impede the timely execution of future renewal initiatives and risks:
- i failing to identify and address potential infrastructure failures or weaknesses, leading to costly repairs or even potential failure of the system

- ii being able to comply with regulatory requirements which could result in fines and penalties
 - iii being able to plan for long-term maintenance and replacement needs which could lead to unexpected expenses and service interruptions
 - iv reduced capacity to respond to, and recover from, natural disasters or other emergencies
 - v reduced ability to improve the overall quality and reliability of the water supply for consumers.
- Condition assessments account for \$1.119m of the recommended Monitoring and Investigations budget for FY2023/24. This is an increase of \$0.354m above the \$0.765m budgeted in FY2022/23. It is recommended operational condition assessment budgets are increased to enable the balance of the highest risk and priority Very High Critical Assets (VHCA) and Highly Critical Assets (HCA) to be assessed. Wellington Water requires sufficient funding for condition assessments to inform and guide the development of capital delivery programmes. Without the knowledge obtained through thorough condition assessments:
 - i maintenance efforts will be increasingly reactive and based on issues as they arise, leading to increased costs and less efficient use of resources. Reactive maintenance often results in a higher average cost of maintenance than proactive maintenance.
 - ii the frequency of repairs required and duration of outages impacting consumers are likely to increase.

Not completing enough condition assessments to support the capital works programme can result in:

- i inadequate budgeting – without a comprehensive understanding of the condition of the assets, it may be difficult to estimate costs of the capital works programme and budget accordingly
 - ii the capital works programme may not address the most critical issues or may not be optimized for the specific needs of the assets. This can lead to inefficiencies and wasted resources
 - iii safety hazards may be overlooked, putting workers and the public at risk
 - iv unnecessary repairs may be made, increasing costs and diverting resources away from more critical issues
 - v reduced asset lifespan – without proper condition assessment assets may not be maintained properly, which can lead to a reduction in their useful lifespan and result in increased costs over time
- Human health monitoring (HHMP) is a component of the budget for wastewater investigations. The requested budget for these activities, which typically incur costs of around \$10,000 to \$15,000 per event, is \$0.242m. A significant portion of this budget (approximately \$60,000) is unavoidable being necessary for mitigating potential impacts on human health.

Operations

21. The Operations investment category includes the control systems covering the electrical, instrumentation and automation systems for Council's stormwater, wastewater, and potable water assets. It is important these systems are operational for controlling and monitoring Council's treatment plant, pump station, flow meter and valve assets.
22. A total budget of \$0.229m is recommended to meet forecast operations costs. This is an uplift of \$0.021m over the FY2023/24 LTP approved budget of \$0.208m due to:
 - labour and plant allocations – 10% uplift applied over the FY2022/23 budget across all water types

- software licences for Scada and hardware maintenance
- additional preventative maintenance to maintain the capacity and capability of control system assets.

23. Table 3 below provides the breakdown of the recommended budget by water type.

Table 3: Summary of proposed Operations OPEX for FY2023/24 by water type

Investment Category (\$000s)	Water Type	2023/24 LTP Budget	2023/24 Proposed Budget	Increase above LTP Budget
Operations	Drinking Water	55	66	11
	Stormwater	26	30	4
	Wastewater	107	110	3
	Wastewater Joint Venture	20	23	3
	Total	208	229	21

24. Figure 1 highlights that the recommended budget for FY2023/24 is only marginally higher than the forecast expenditure in FY2022/23, and below the actual expenditure in FY2021/22.

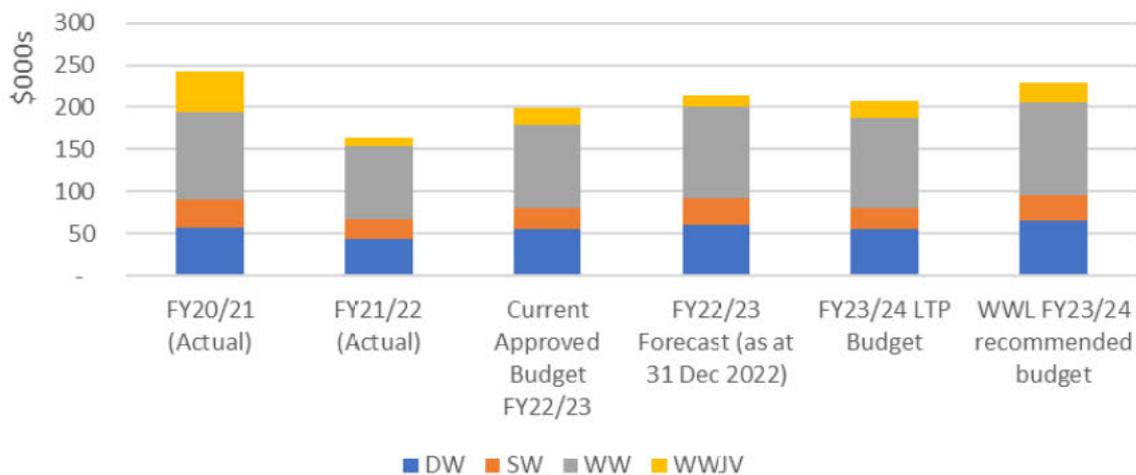


Figure 1: Actual, budget, forecast and proposed operations budgets for FY2020/21 - FY2023/24

25. Wellington Water advises that the majority of the proposed budget for Operations is unavoidable, being necessary to cover the costs essential for the running of Council control system assets. A small proportion of the budget (\$0.046) allocated for preventative maintenance of control systems could be reduced. However, this could result in significant risks including:

- equipment failure – without proper maintenance, control system assets such as valves, pumps, and control panels can malfunction or break down in some cases resulting in immediate loss of service, leading to disruptions in water supply and potential safety hazards
- system downtime – if control system assets are not maintained, they may require more frequent repairs or replacements, leading to extended downtime and decreased efficiency

- increased costs – neglecting preventative maintenance can lead to more costly repairs and replacements in the long run, as well as increased energy consumption and labour costs
- environmental risks – poorly maintained control systems can lead to leaks or spills, which can have negative impacts on the environment and local communities.

Planned Maintenance

26. The planned maintenance investment category includes water and wastewater pump station, utility and network asset maintenance, and stormwater maintenance activities.
27. A total budget of \$3.984m is recommended to meet forecast planned maintenance costs. This is an uplift of \$0.460m over the FY2023/24 LTP allocated budget of \$3.525m. Table 4 below provides the breakdown of the recommended budget by water type.

Table 4: Summary of proposed Planned Maintenance OPEX for FY2023/24 by water type

Investment Category (\$000s)	Water Type	2023/24 LTP Budget	2023/24 Proposed Budget	Increase above LTP Budget
Planned Maintenance	Drinking Water	1,203	1,564	359
	Stormwater	781	1,025	245
	Wastewater	672	749	77
	Wastewater Joint Venture	867	646	(221)
	Total	3,525	3,984	460

28. A large proportion of the recommended budget increase in the Planned Maintenance investment category is due to inflation and higher costs for goods and services. Other reasons for the increase include:
- growth and water demand is putting pressure on maintenance programmes to ensure pump stations and other assets across the network are being maintained to required operational service levels
 - additional funding required for non-residential demand management. This is to support the focus on Sustainable Water Supply and Demand
 - reservoir maintenance, pump station maintenance and area water meters and flushing wastewater pipe activities.
29. Figure 2 highlights the growth in the recommended budget for FY2023/24, reflecting the factors noted above driving cost increases.

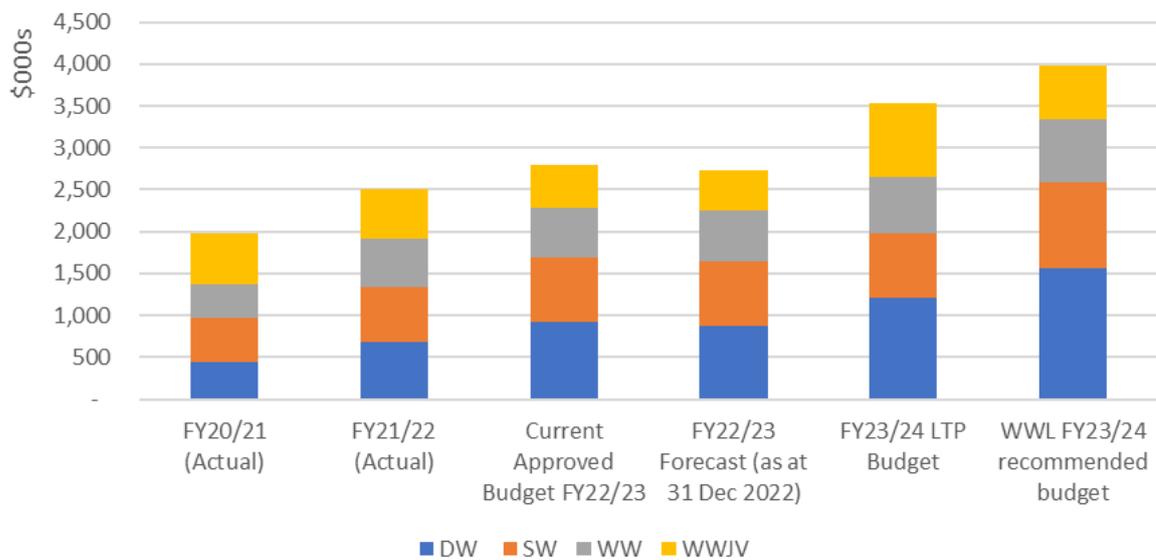


Figure 2: Actual, budget, forecast and proposed planned maintenance budgets FY2020/21 - FY2023/24 (\$000s)

30. It is possible for some reductions within the Planned Maintenance investment category. However, not providing funding to the recommended levels comes with the following risks:
- If funding for drainage investigations is reduced, Wellington Water will have reduced capacity to respond to pollution events in waterways and will not be able to:
 - respond to environmental impacts in accordance with global stormwater consents
 - fully plan or deliver a structured infiltration and inflow investigation programme to increase asset capability, capacity and life.
 - If there is any reduction to work on water loss management, Wellington Water’s ability to triage leaks and complete repairs will be limited, restricting high-priority efforts to manage leakage through the water loss programme.
 - If network planned maintenance is reduced, Wellington Water will have limited ability to deliver planned activities across linear assets, impacting on asset life, and therefore levels of service (failures would occur sooner, and could be more expensive to repair if they have not had sufficient planned maintenance).
 - If pump station inspections are reduced, the potential for overflows increases, potentially leading to enforcement action. Odour complaints would likely increase, and Wellington Water would have to adopt a ‘run to failure’ asset management approach.
 - If non-critical valve maintenance is reduced, maintenance backlogs will further increase, risking the potential for assets to not operate when required, particularly in response to mains failures.

Reactive Maintenance

31. A total budget of \$8.161m is recommended for reactive maintenance activities. This is an uplift of \$1.635m from the FY2023/24 LTP approved budget of \$6.526m (including the additional \$1.020m approved by Council on 20 December 2022).
32. Table 5 below outlines Wellington Water’s recommended changes to the allocated Reactive Maintenance FY2023/24 OPEX budget.

Table 5: Summary of proposed Reactive Maintenance OPEX for FY2023/24 by water type

Investment Category (\$000s)	Water Type	2023/24 LTP Budget	2023/24 Proposed Budget	Increase above LTP Budget
Reactive Maintenance	Drinking Water	3,788	4,927	1,139
	Stormwater	699	975	276
	Wastewater	1,538	1,665	127
	Wastewater Joint Venture	500	593	93
	Total	6,526	8,161	1,635

33. While dependent on the number of failures, reactive maintenance costs are anticipated to increase based on failure trends experienced to date, the average age of assets and the anticipated resulting rates of renewal/replacement.
34. The main reasons for the recommend increase to the Reactive Maintenance investment category budget include:
 - significant cost increases associated with higher labour, consultant, contractor and material costs
 - to reduce the backlog in stormwater and potable water network maintenance including leak repairs
 - leaks are more expensive to detect and repair given the uplift of 20% in contractor costs. They are also becoming increasingly more complex to repair.
35. Figure 3 shows previous reactive maintenance expenditure, forecast expenditure for FY2022/23 against budget and the proposed increase reflecting the factors noted above. As shown in Figure 3, Wellington Water’s recommended budget increase is consistent with current trends, noting that current forecasts for FY2022/23 indicate expenditure of \$7.066m for reactive maintenance.

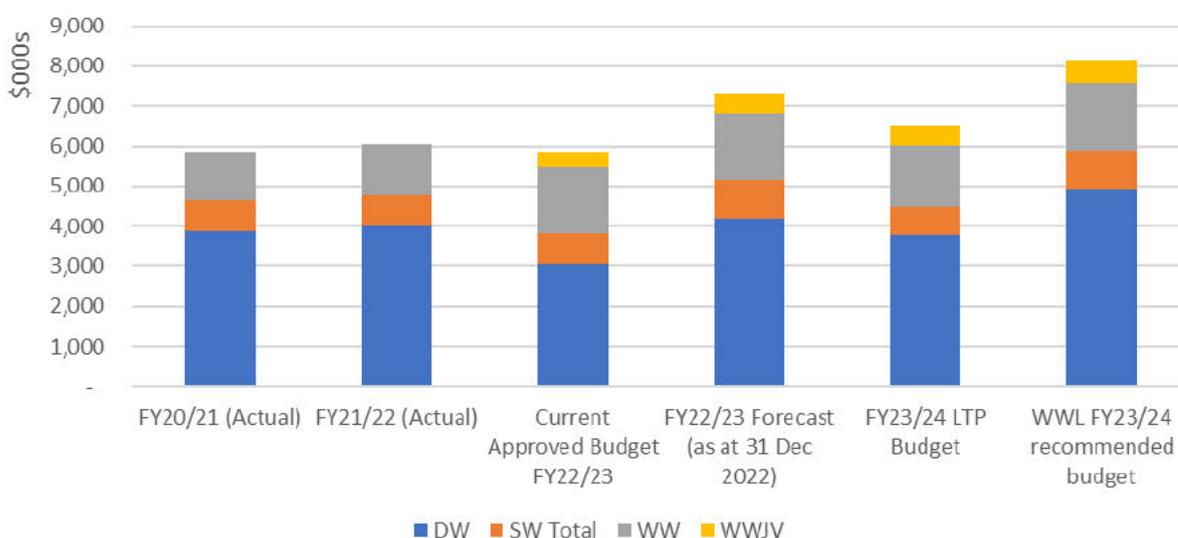


Figure 3: Actual, budget, forecast and proposed reactive maintenance budgets FY2020/21 - FY2023/24

36. Within the Reactive Maintenance investment category recommended budget, \$0.425m could be deferred, however, there is a risk in doing so. This funding is being requested to enable an uplift in strategic leak repairs as part of the Sustainable Water Supply and Demand programme (\$0.225m), and carbon reduction for the wastewater joint venture (\$0.200m). We strongly recommend as a priority, consistent with Council’s early signals, increased investment in Sustainable Water Supply activities.
37. Approximately \$6.159m of the reactive maintenance budget could be reduced by actively choosing to reduce or stop responding to certain unplanned network maintenance jobs for all water types, including the joint venture. The risks with reducing the budget for unplanned network maintenance in FY2023/24 include:
- A reduction or a complete stop of non-urgent instructed works, such as the installation of new valves to reduce the size of a shutdown area, or customer requests/complaints. The consequence of not doing instructed works is that we fail to improve the efficient operation of the network, so water outage areas become bigger, resulting in longer outages with a greater number of customers affected
 - A reduction in targeted subcontractor spend would reduce the available resources to attend to customer calls, by only attending to high priority or medium priority (P1 and P2) work requests. This means that the non-urgent work backlog will grow.

An analysis of leakage data (see Figure 4) reveals that despite undertaking a comparable number of repairs during the first half of the current financial year (FY2022/23) compared to the previous financial year (FY1021/22), the backlog of unresolved leaks remains high at 325. This is due to an increase in the number of reported leaks in the current financial year (FY2022/23), which is already exceeding the total number of reported leaks for the entirety of the previous financial year. While there are no specific projections for the number of leak repairs forecast to be completed in the coming financial year (FY2023/24), the current backlog, which is 41% higher than the total backlog of the previous financial year, suggests that a greater number of repairs will be necessary to prevent further escalation of the backlog.

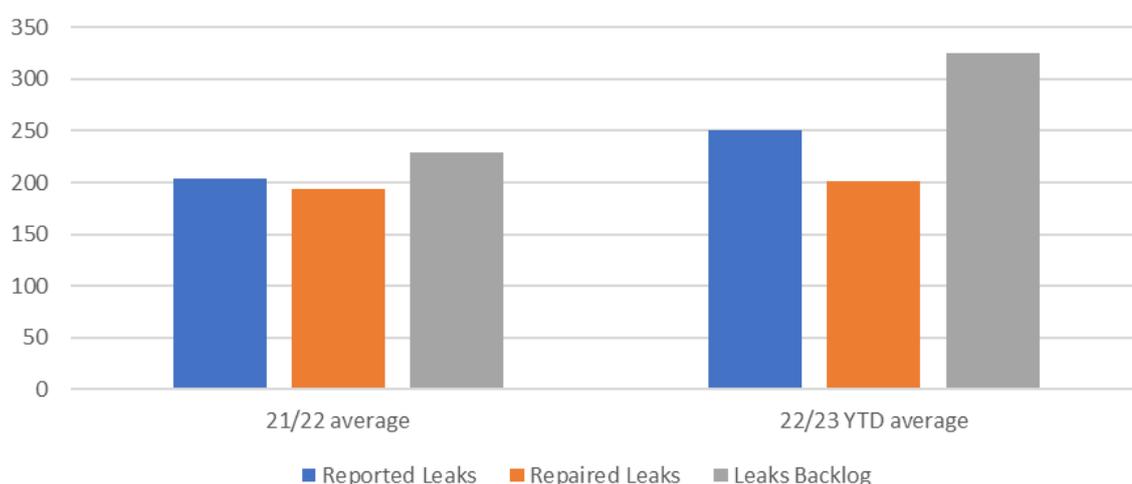


Figure 4: Reported, Repaired and Backlog Leaks – FY21/22 – FY 22/23 (Year to date)

Any significant reduction of subcontractor spend will likely drive skilled workers elsewhere and securing them back, if additional funding becomes available, will take time. We note that the current job backlog sits at over 1,014 jobs (see Figure 5) and increases to this number would likely result in increased customer dissatisfaction.



Figure 5: Number of open jobs (June 2020 - January 2023)

- It has been observed that since the first quarter of FY2022/23, the unit price for wastewater and stormwater jobs has experienced a roughly 37% increase. As a result, completing the same number of jobs in the second quarter has become more costly in comparison to the first quarter. Any additional pressure on the reactive maintenance budget is likely to have a significant impact on Wellington Water’s ability to provide appropriate levels of service in FY2023/24.
 - A reduction in after-hours jobs would reduce costs given the penal rates applied. After hours work is mainly governed by the type of work required. There could be a significant risk to local businesses with this approach, as water supplies may be cut during the working day to address issues that could otherwise be addressed at night.
38. It is important to note that the proposed operating budget for FY2023/24 does not account for any allocation of funds for unforeseen emergency events. These types of expenses are typically handled through separate funding channels by the Council.

Treatment plant

39. The Treatment Plant investment category groups all activities relating to the operation of both wastewater and wastewater joint venture treatment plants. This includes planned and reactive maintenance, operations, and investigations¹.
40. Wellington Water advises that the proposed budget for Treatment Plants is unavoidable, covering activities essential in delivering this service.
41. The recommended budget for Treatment Plants for FY2023/24 is \$8.368m, which is \$1.052m above the LTP allocated budget of \$7.316m, as indicated in Table 6 below:

Table 6: Summary of proposed Treatment Plant OPEX for FY2023/24 by water type

Investment Category (\$000s)	Water Type	2023/24 LTP Budget	2023/24 Proposed Budget	Increase above LTP Budget
Treatment Plant	Wastewater	315	249	(65)
	Wastewater Joint Venture	7,002	8,119	1,117
	Total	7,316	8,368	1,052

42. As a proactive measure, Wellington Water has already implemented cost savings by deferring treatment plant investigations, resulting in a reduction of \$0.65m in the wastewater budget. This has

¹ This is different to the OPEX budgets for all other activities delivered by Wellington Water which are separated under the relevant investment category.

been reflected in the recommended budget numbers and explains why the proposed budget is lower than the LTP approved budget.

43. In addition to general inflation factors, the following key drivers account for the increase in the recommended Treatment Plant budget (both Wastewater and Wastewater Joint venture):
- a 15% increase has been assumed over projected costs for FY2022/23 for gas
 - the cost of power is expected to increase in FY2023/24 by 55% over the current FY2022/23 budget²
 - the tariff for sludge disposal is increasing from \$207/tonne in FY2022/23 to \$347/tonne for FY2023/24 (including GST and the plant operator’s 9% markup)
 - a Consumer Price Index (CPI) of 20% has been assumed impacting management and overhead costs (not included within Wellington Water’s general Management and Advisory Services fee) and maintenance and operational costs
 - variation in the contract with the Plant Manager, Veolia, which is currently under negotiation
 - increase in outfall pipe maintenance – we have budgeted an allowance for two incidents in FY2023/24 based on current trends.
44. Figure 6 highlights the growth in the recommended budget for FY2023/24, reflecting the factors noted above driving cost increases.

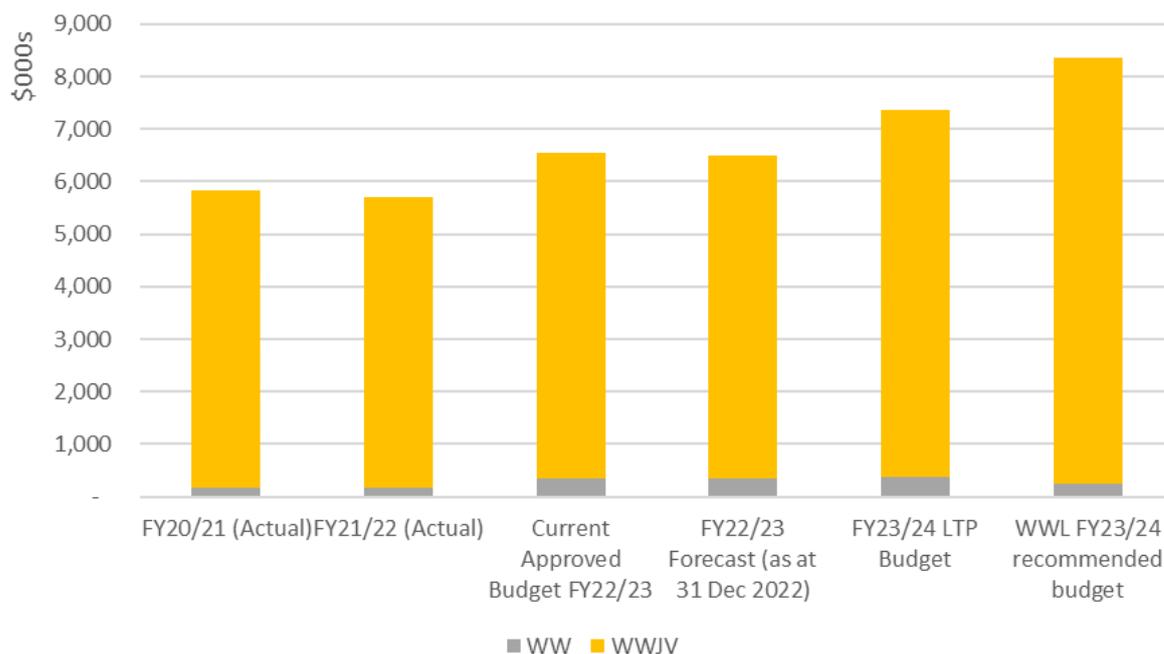


Figure 6: Actual, budget, forecast and proposed Treatment Plant budgets FY2020/21 - FY2023/24

45. Reducing treatment plant planned maintenance would increase the likelihood of equipment malfunction and failure. This could result in a severe disruption to treatment plant operations. Such disruptions could have a significant negative impact on service levels from decreased efficiency in the treatment of wastewater and potential environmental degradation associated with the release of untreated wastewater. As such, it is crucial that an adequate level of preventative maintenance is maintained to minimise the risk of equipment breakdown and ensure continuity of service.

² Figures based on the January 2023 approved electricity tender recommendation.

Management and Advisory Services

46. A total budget of \$4.164m is recommended for Management and Advisory Services. This is \$0.144m lower than the allocated LTP budget of \$4.308m (including the uplift approved by Council on 20 December 2022).
47. The reason for this difference is due to a difference in the information held between Wellington Water and the Council's systems which has since been resolved. It is recommended this difference be used to address the shortfalls identified within other investment categories.

Advice Hutt City Council Regarding Three Waters Capital Delivery Plan for the Financial Years 2023/24 and 2024/25

TO [REDACTED], Strategic Advisor, Hutt City Council

COPIED TO [REDACTED], Head of Service Planning, Wellington Water; [REDACTED], General Manager Customer Operations, Wellington Water

FROM [REDACTED], Group Manager Network Strategy & Planning, Wellington Water

DATE 27 April 2023

Action sought

	Action sought	Deadline
[REDACTED] Strategic Advisor	Note the contents of this paper and respond in writing to the recommendations	24 May 2023

Contact for telephone discussion (if required)

Name	Position		1st Contact
[REDACTED]	Group Manager Network Strategy & Planning, Wellington Water	[REDACTED]	
[REDACTED]	Head of Service Planning, Wellington Water	[REDACTED]	x

Purpose

1. This paper advises Hutt City Council (Council) of:
 - a. the capital delivery plan Wellington Water Limited (Wellington Water) plans to deliver within the approved FY2023/24 budget; and
 - b. an indicative capital delivery plan for FY2024/25.
2. This paper advances our previous advice to Council dated 2 February 2022.

Recommended action

It is recommended that Council:

- a. **confirm** the three waters capital budget for FY2023/24 is \$68.00m;
- b. **agree** to carry over any remaining budget from FY2022/23 into the final budget for FY2023/24,
- c. **note** that the total value of the projects in the FY2023/24 capital delivery plan has been intentionally overprogrammed to exceed Council's FY2023/24 budget to mitigate the risk of underspend;
- d. **note** that Wellington Water is signalling an indicative FY2024/25 budget of \$88.40m, \$6.20m above Council's FY2024/25 approved Long Term Plan (LTP) budget of \$82.20m, to continue year-on-year growth of the capital delivery plan;
- e. **note** that the proposed capital delivery plan for FY2024/25 is indicative only and is subject to funding approval through the Council FY2024-34 Long-Term Plan or Three Waters Reform processes (pending confirmation on requirements from the Department of Internal Affairs);
- f. **note** that this advice will be released and published on Wellington Water's public website, subject to any redactions consistent with the Local Government Official Information and Meetings Act 1987, once Council has considered and made decisions regarding this advice.

FY2023/24 and FY2024/25 Capital Delivery Plan

3. In previous advice to you dated 2 December 2022 and 2 February 2023 respectively, we confirmed we are seeking a CAPEX budget of between \$65-68m for FY2023/24, exceeding Council's 3-year Long-Term Plan (LTP) budget by between \$3m-\$6m. It was recommended that Council increase the total CAPEX budget available for the three-year 2021-24 LTP to \$154-\$157m. On 23 March 2023, in response to this recommendation, Council approved a FY2023/24 budget of \$68.00m.
4. As noted in our previous advice, Wellington Water has been working on sustainably growing the capital programme over the past few years. Council's FY2024/25 LTP budget is \$82.2m and while the final funding levels from FY2024/25 onwards are subject to Council LTP and Three Waters Reform processes, Wellington Water proposes an indicative FY2024/25 budget of \$88.4m should be considered by Council. This level of funding would continue the year-on-year capital growth model. It would also ensure Council's capital programme is well placed with a healthy level of capital investment underway when Council's assets move into a new three waters entity.

5. An FY2024/25 budget of \$88.4m is a 30% increase on the approved FY2023/24 budget. This will ensure Council’s capital programme is well placed with a healthy level of capital investment underway when Council’s assets move into a new entity.
6. Figure 1 illustrates the year-on-year growth of Council’s capital delivery plan.

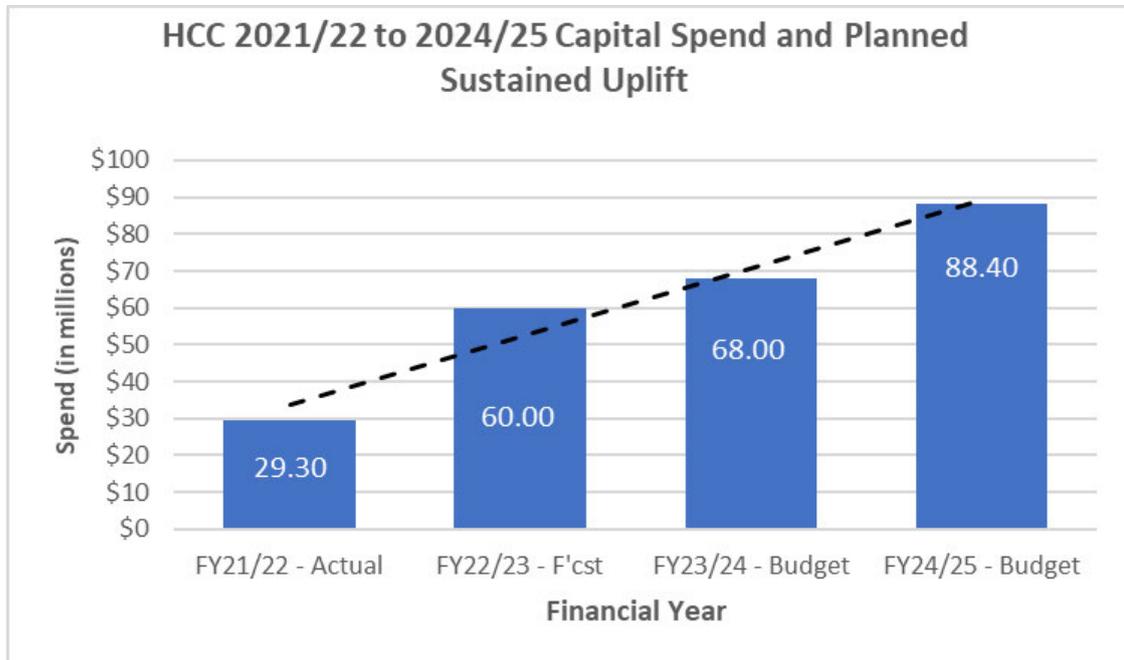


Figure 1: Hutt City Council CAPEX – FY2021-2025

7. We have now developed a capital delivery plan for FY2023/24 and indicative plan FY2024/25 budgeted between:
 - a. FY2023/24: \$68.00m (100%) - \$79.03m (116% overprogrammed); and
 - b. FY2024/25: \$88.40m (100%) - \$141.63m (160% overprogrammed).
8. The overprogrammed budgets help mitigate delivery risk and ensure the capital delivery plan comes in close to budget at the end of the financial year. This is achieved by having new projects available to start should the schedules of other projects underway start to shift.
9. Council’s FY2023/24 overprogrammed capital delivery plan includes a total of 126 projects. Our intention is to manage delivery of these projects within the approved budget. The FY2023/24 plan comprises:
 - 76% renewals projects by value = \$60.59m
 - Seven major projects = \$10.15m
 - 119 other capital projects (including Projects self-delivered by operations (minor works and reactive)) = \$68.88m, of which:
 - 10 are VHCA projects = \$6.67m
 - significant renewal and level of service investment in the Seaview Wastewater Treatment Plant = \$8.77m.
10. The capital delivery plan also includes drinking water reactive renewals. This is to support the water loss initiative and renew water pipes that repeatedly leak rather than keep repairing them. This is more effective and efficient, overall causing less down time of the water network and reducing overall water loss.

11. Table 1 illustrates expenditure levels of the overprogrammed FY2023/24 and FY2024/25 capital delivery plan by water type and Local Government Act 2002 (LGA) classification.

Table 1: Summary of proposed overprogrammed expenditure for FY2023/24 and FY2024/25 by water and LGA classification (\$)

Water	LGA Category	FY2023/24 Approved Budget (\$)	FY2023/24 Overprogrammed Budgeted (\$)	FY2024/25 Indicative Proposed Funding (\$) ⁽¹⁾	FY2024/25 Overprogrammed Budgeted (\$)
Drinking Water	Growth	495,521	2,025,000	644,177	25,025,000
	Level of Service	4,821,888	5,999,988	6,268,454	13,035,870
	Renewal	20,453,542	18,608,300	26,589,605	18,215,000
Total Drinking Water		25,770,951	26,633,288	33,502,236	56,275,870
Stormwater	Growth	179,107	2,150,000	232,839	2,600,000
	Level of Service	2,595,967	1,037,333	3,374,757	1,583,066
	Renewal	1,368,867	11,589,091	1,779,527	9,788,550
Total Stormwater		4,143,941	14,776,424	5,387,123	13,971,616
Wastewater	Growth	5,240,518	1,200,000	6,812,673	6,100,000
	Level of Service	6,461,899	1,179,867	8,400,469	5,228,000
	Renewal	26,382,684	23,041,490	34,297,489	30,751,738
Total Wastewater		38,085,101	25,421,357	49,510,631	42,079,738
Wastewater JV	Growth	-	-	-	-
	Level of Service	-	4,846,600	-	4,531,600
	Renewal	-	7,350,000	-	24,770,000
Total Wastewater JV		-	12,196,600	-	29,301,600
Grand Total		67,999,993	79,027,669	88,399,991	141,628,824

⁽¹⁾ Subject to confirmation through the Council LTP process and/ or by the NTU.

12. Council's overprogrammed capital delivery plan includes seven major projects and three significant projects that together amount to 42% and 85% of the FY2023/24 budget and FY2024/25 indicative proposed budget respectively. Table 2 highlights these projects.

Table 2: Major Projects for FY2023/24 & FY2024/25 by Water and LGA Classification (\$)

Water	LGA Classification	Project Name	FY2023/24 WWL Recommended Budgeted (\$s)	FY2024/25 WWL Recommended Budgeted (\$s)
Drinking Water	Growth	Naenae No 2 Reservoir and Outlet Main	2,000,000	25,000,000
	Total		2,000,000	25,000,000
Wastewater	Growth	Seaview Wastewater (excl JV) Treatment Plant storage	50,000	500,000
	Renewal	Seaview WWTP Sludge Dryer	2,000,000	10,000,000
		Seaview WWTP Outfall	1,000,000	2,000,000
	Total		3,050,000	12,500,000
Wastewater JV	Level of Service	Seaview WWTP Wastewater Storage	1,900,000	920,000
	Renewal	Trunk Type B Network Development - Petone Collecting Wastewater Upgrade	2,000,000	15,000,000

		Trunk Type B Network Development - Barber Grove to Wastewater Treatment Plant Duplication	1,200,000	-
	Total		5,100,000	15,920,000
Grand Total			10,150,000	53,420,000
Other significant projects >\$5M				
Drinking Water	Renewal	HCC Water Main Renewals	7,000,000	10,000,000
	Total		7,000,000	10,000,000
Wastewater	Renewal	Avalon WW Renewals Programme 21-22	6,000,000	6,000,000
		Knights Road - Colin Grove E Coli - Wastewater	5,500,000	5,500,000
	Total		11,500,000	11,500,000
Grand Total			18,500,000	21,500,000
Proportion of approved/ indicative proposed budget			42%	85%

Appendix A provides the full list of projects that make up Councils overprogrammed FY2023/24 capital delivery plan and indicative FY2024/25 capital delivery plan.

Risks

13. Changes to the Three Waters Reform, and the subsequent requirement for councils to include water infrastructure in their 2024-34 LTPs, increases uncertainty of the short-term budgets available for the capital programme. Wellington Water has continued to plan for a capital delivery plan in FY2024/25 that follows the year-on-year capital delivery plan growth model, despite this uncertainty. Continuing with this approach ensures Council is aware of the flow on investment needs in FY2024/25 that result from investment decisions made in FY2023/24. It also highlights to the National Transition Unit, and sector, that Council has a programme of capital work ready to continue beyond next financial year.
14. 85% of the indicative proposed FY2024/25 budget of \$88.4m is made up of major and significant projects that have already commenced or are due to start in FY2023/24. If all these projects do become committed prior to FY2024/25, there will be limited budget available for other programmes of work in Council's capital delivery plan unless funding is increased above the level Wellington Water is currently signalling should be adopted at a minimum (\$88.4m). Note, the proportion of the budget made up of major and significant projects increases to 91% of the FY2024/25 capital delivery plan if FY2024/25 budgets remain at the current LTP level of \$82.2m. To mitigate this risk, Council could consider increasing the FY2024/25 budget above \$88.4m. This will ensure as many projects as possible which have started in FY2022/23 or earlier, can continue to progress through FY2024/25. Without additional FY2024/25 budget, some projects may need to be slowed down or pushed out.
15. As noted, Wellington Water intends to manage the programme within the overall approved budget but to do this, some projects may need to be slowed down or pushed out. This type of programme management approach will likely increase individual project costs further.
16. As noted in previous advice to Council, Wellington Water is experiencing significant increases in the costs of material and labour due to higher than anticipated inflation and market capacity pressures. This has placed pressure on Council's capital delivery plan, meaning fewer projects may be delivered in FY2023/24 than initially planned for in the LTP.
17. Should inflationary pressures continue to put pressure on project budgets as currently scoped, Council may need to make decisions around rescoping projects, reallocating budgets from lower priority projects, or increasing budgets throughout the year.
18. Industry-wide resource and supply chain constraints of both materials and personnel continue to impact the delivery of projects. To mitigate the likelihood and impact of this risk, we will continue to work with consultants and contractors to only propose projects in the

overprogrammed capital delivery plan that we are confident of delivering within the approved budgets.

Next steps

19. Please provide a response to the recommendations in this paper to [REDACTED] by xx May 2023.

Appendix A: Projects for FY2023/24 & FY2024/25 by Water, LGA Classification and Asset Investment Category (\$)

Water	LGA Classification	Project Name	Asset Type	FY2023/24 WWL Recommended Overprogrammed Budgeted (\$s)	FY2024/25 WWL Recommended Overprogrammed Budgeted (\$s)
Drinking Water	Renewal	HCC Water Main Renewals	Network	7,000,000	10,000,000
Drinking Water	Renewal	Wainuiomata Water Supply Renewals 21 - 22	Network	4,000,000	4,000,000
Drinking Water	Renewal	Ava Street Water Main Renewal	Network	1,800,000	1,000,000
Drinking Water	Renewal	Closing Bulk Water Cross Connections - Rata and Sunville Rezoning	Network	1,100,000	-
Drinking Water	Renewal	Kamaha Street Pressure Control Valve Installation	Control systems	1,000,000	10,000
Drinking Water	Renewal	Dedicated Service Connections Renewals	Network	900,000	900,000
Drinking Water	Renewal	HCC Reservoir VHCA Remedial Works	Reservoirs	600,000	500,000
Drinking Water	Renewal	Waddington Drive (Naenae Road to Seddon to Rata Street) water main renewal	Network	200,000	-
Drinking Water	Renewal	HCC District meter area PLANNED renewals	Network	200,000	200,000
Drinking Water	Renewal	HCC Reactive Renewals (Water Supply)	Network	140,000	100,000
Drinking Water	Renewal	Taita Pump Station Renewals	Pump Stations	100,000	50,000
Drinking Water	Renewal	WCC PRV Renewals	Network	100,000	100,000
Drinking Water	Renewal	HCC Water Pump Station PLANNED Renewals	Pump Stations	90,000	50,000
Drinking Water	Renewal	HCC Water Pump Station REACTIVE Renewals	Pump Stations	85,000	50,000
Drinking Water	Renewal	HCC Reactive Works Reservoirs (Operations)	Reservoirs	75,000	75,000
Drinking Water	Renewal	HCC WS Reactive Renewals - Storage	Reservoirs	60,000	60,000
Drinking Water	Renewal	HCC District meter area REACTIVE renewals	Network	50,000	75,000
Drinking Water	Renewal	(WSP_02.1) Reservoir leakage remediation - HCC	Reservoirs	25,000	25,000
Drinking Water	Renewal	HCC Resilient Reservoir Emergency Supply Equipment Procurement	Reservoirs	22,000	-
Drinking Water	Renewal	Wilkie Cres Watermains Renewal and Upgrade	Network	20,000	-
Drinking Water	Renewal	Copeland Street and Oxford Terrace – Critical Pipelines Seismic Upgrade	Network	20,000	-
Drinking Water	Renewal	HCC Security Locks Reservoirs	Reservoirs	20,000	20,000
Drinking Water	Renewal	HCC CIR Equipment Renewals	Other	1,300	-
Drinking Water	Renewal	Drinking Water Reactive Renewals	Network	1,000,000	1,000,000
Drinking Water	Level of Service	District Meter Area (DMA) meter fleet	Network	250,000	-
Drinking Water	Level of Service	Localised Pressure Management Pilot	Network	100,000	-
Drinking Water	Level of Service	Naenae Reservoir - Water Safety	Reservoirs	20,000	-
Drinking Water	Level of Service	HCC Management of Fire Hydrant Use	Other	650,000	-
Drinking Water	Level of Service	Point Howard to Lowry Bay Link Main	Network	200,000	4,000,000
Drinking Water	Level of Service	Kingsley Reservoir Seismic replacement	Reservoirs	500,000	500,000
Drinking Water	Level of Service	HCC Modelling - Potable Water Network	Non-asset based	40,000	50,000
Drinking Water	Level of Service	HCC Firefighting upgrades - Hutt Valley Floor	Network	100,000	1,362,192
Drinking Water	Level of Service	Critical Pipelines Seismic Upgrade - Maungaraki Reservoir inlet main	Network	10,000	90,000

Drinking Water	Level of Service	City pump stations seismic strengthening programme - provisional subject to further assessment	Pump Stations	10,000	60,000
Drinking Water	Level of Service	Critical Pipelines Seismic Upgrade - Myrtle St	Network	10,000	50,000
Drinking Water	Level of Service	Commerical Water Meter - Change of Ownership	Network	-	500,000
Drinking Water	Level of Service	Critical Pipelines Seismic Upgrade - Major Drive	Network	10,000	40,000
Drinking Water	Level of Service	HCC Firefighting upgrades - Wainuiomata	Other	39,706	397,062
Drinking Water	Level of Service	Critical Pipelines Seismic Upgrade - Hutt Road	Network	10,000	35,000
Drinking Water	Level of Service	Sweetacres Watermain Upgrade + PRV + meter	Network	21,082	210,816
Drinking Water	Level of Service	HCC Authorised Tanker Fill Points	Network	6,000	60,000
Drinking Water	Level of Service	Critical pipelines seismic upgrade - 21 George St Emergency Cross Connection (Kingsley to Delaney zones)	Network	-	40,000
Drinking Water	Level of Service	Korokoro water pump station seismic upgrade	Pump Stations	-	30,000
Drinking Water	Level of Service	Stokes Valley and Wainuiomata Galvanised Iron RiderMain Renewals	Network	3,000,000	5,000,000
Drinking Water	Level of Service	Reservoir Access Health and Safety Improvements	Reservoirs	20,000	20,000
Drinking Water	Level of Service	Pressure Management Stage 2 - Pressure monitoring and optimisation - HCC	Network	703,200	590,800
Drinking Water	Level of Service	Reservoir safety improvements	Reservoirs	300,000	-
Drinking Water	Growth	Naenae No 2 Reservoir and Outlet Main	Reservoirs	2,000,000	25,000,000
Drinking Water	Growth	Drinking water development projects – reactive	Other	25,000	25,000
Stormwater	Renewal	Naenae VHCA SW Buller Grove Renewals	Network	4,886,371	-
Stormwater	Renewal	Knights Road - Colin Grove E Coli - Stormwater	Stormwater Storage/Treatment	3,500,000	4,500,000
Stormwater	Renewal	Jackson Street Stormwater Renewals	Network	2,600,000	3,500,000
Stormwater	Renewal	Te Mome Pump Station Renewal and Optimisation	Pump Stations	300,000	500,000
Stormwater	Renewal	SWPS_Pump Station Reactive Renewals (SW)	Pump Stations	60,000	60,000
Stormwater	Renewal	VHCA - Horlor St to Pilcher Cres SW Renewal	Network	50,000	150,000
Stormwater	Renewal	Manor Park Reservoir	Reservoirs	50,000	50,000
Stormwater	Renewal	HCC Stormwater Pump Stations PLANNED Renewals	Pump Stations	50,000	50,000
Stormwater	Renewal	HCC-SW-VHCA Pipe Renewal Programme	Network	40,000	500,000
Stormwater	Renewal	VHCA - 427 Hutt Road SW Renewal	Network	27,962	27,962
Stormwater	Renewal	Stokes Valley VHCA SW Renewals Project	Network	24,758	450,588
Stormwater	Level of Service	Freshwater Management tool - Build	Non-asset based	100,000	100,000
Stormwater	Level of Service	HCC Global consent for operations and maintenance works in streams	Resource Consents	15,000	15,000
Stormwater	Level of Service	Wellesley College stream inlet and outlet erosion protection	Network	20,000	-
Stormwater	Level of Service	Muritai Rd (92-96) Rona St, Marine Parade (19) Stormwater Upgrades	Network	200,000	200,000
Stormwater	Level of Service	Stokes Valley Catchment Flood Mitigation	Network	-	20,000
Stormwater	Level of Service	HCC Stormwater Management Strategy	Non-asset based	150,000	125,000
Stormwater	Level of Service	HCC Stormwater Network Modelling	Non-asset based	200,000	250,000
Stormwater	Level of Service	Network discharges programme: subcatchment stormwater management plan	Non-asset based	189,000	237,600
Stormwater	Level of Service	SP3-1 - CAPEX SW quality: Green Infrastructure Delivery	Other	23,333	233,333
Stormwater	Level of Service	DC3 - CAPEX SW quality: Restoring and/or daylighting natural channels.	Other	-	20,000
Stormwater	Level of Service	OM4-1 - CAPEX SW quality: Condition assessments Programme	Non-asset based	20,000	100,000

Stormwater	Level of Service	SP7-1 - CAPEX SW quality: Leading by Example	Other	20,000	100,000
Stormwater	Level of Service	Capital Carbon Modelling	Non-asset based	-	35,000
Stormwater	Level of Service	MI3 - CAPEX SW quality: Site-specific contaminant load model	Non-asset based	-	23,333
Stormwater	Level of Service	OM1-1 - CAPEX SW quality: Enhanced Streams Works programme	Non-asset based	-	21,000
Stormwater	Level of Service	MI2 - CAPEX SW quality: Regional Contaminant Load Model	Non-asset based	-	2,800
Stormwater	Level of Service	Climate Resilience Plan	Non-asset based	100,000	100,000
Stormwater	Growth	Woburn Stormwater Upgrades (PS+Pipeline)	Network	1,000,000	1,000,000
Stormwater	Growth	Black Creek improvements - A	Network	50,000	500,000
Stormwater	Growth	Melling Stormwater Upgrades (PS+Pipelines)	Network	1,000,000	1,000,000
Stormwater	Growth	Stormwater development projects – reactive	Network	100,000	100,000
Wastewater	Renewal	Avalon WW Renewals Programme 21-22	Network	6,000,000	6,000,000
Wastewater	Renewal	Knights Road - Colin Grove E Coli - Wastewater	Network	5,500,000	5,500,000
Wastewater	Renewal	Gracefield Wastewater Renewals	Network	3,000,000	20,000
Wastewater	Renewal	Wainuiomata Wastewater Renewals 21-22	Network	3,000,000	20,000
Wastewater	Renewal	Seaview WWTP Sludge Dryer	Treatment Plants	2,000,000	10,000,000
Wastewater	Renewal	Wainui Road and Rishworth Street Sewer Renewals	Network	1,100,000	-
Wastewater	Renewal	Seaview WWTP Outfall	Treatment Plants	1,000,000	2,000,000
Wastewater	Renewal	AliceTown - Hume Street Area Renewals	Network	575,998	671,998
Wastewater	Renewal	Tama Street Area Renewals	Network	265,492	309,741
Wastewater	Renewal	HCC Wastewater Pump Stations PLANNED Renewals	Pump Stations	200,000	400,000
Wastewater	Renewal	Naenae Wastewater Renewals	Network	100,000	2,000,000
Wastewater	Renewal	Wainuiomata Wastewater Renewals	Network	100,000	3,000,000
Wastewater	Renewal	HCC Wastewater Pump Stations REACTIVE Renewals	Pump Stations	100,000	80,000
Wastewater	Renewal	Bell Road	Network	20,000	-
Wastewater	Renewal	Naenae Sewer Renewals - Wilkie Swainson & Grierson Seddon St	Network	20,000	-
Wastewater	Renewal	Stokes Valley Road Wastewater Renewal	Network	20,000	400,000
Wastewater	Renewal	HCC-WW-VHCA Pipe Renewal Programme	Network	20,000	50,000
Wastewater	Renewal	VHCA-Rising main ADS-Ava Sewer	Network	20,000	150,000
Wastewater	Renewal	VHCA-Gravity main Epuni rail crossing	Network	-	100,000
Wastewater	Renewal	VHCA-Gravity main Esplanade 2	Network	-	30,000
Wastewater	Renewal	VHCA-Gravity main Esplanade	Network	-	20,000
Wastewater	Level of Service	Epuni and Woburn WW Network Upgrades	Network	150,000	-
Wastewater	Level of Service	HCC Wastewater Model	Non-asset based	150,000	150,000
Wastewater	Level of Service	Resource consent dry weather waste water network blockages	Resource Consents	32,400	162,000
Wastewater	Level of Service	Wainuiomata North Trunk Wastewater Renewals	Network	270,000	4,700,000
Wastewater	Level of Service	Smart Wastewater Network (Regional) - HCC	Network	115,467	-
Wastewater	Level of Service	Taita Rock Wastewater Pipe Protection	Network	300,000	-
Wastewater	Level of Service	Network Discharges Programme: Early establishment of collaborative committee	Non-asset based	-	54,000

Wastewater	Level of Service	Network Discharges Programme: wet weather overflows Strategic Reduction Plan	Non-asset based	162,000	162,000
Wastewater	Growth	Beaumont Ave WW pump station connection / storage tank	Storage	50,000	500,000
Wastewater	Growth	Lower Hutt CBD Wastewater (excl JV) Bypass	Network	1,000,000	5,000,000
Wastewater	Growth	Seaview Wastewater (excl JV) Treatment Plant storage	Storage	50,000	500,000
Wastewater	Growth	Wastewater (excl JV) development projects reactive	Network	100,000	100,000
Wastewater JV	Renewal	Trunk Type B Network Development - Petone Collecting Wastewater Upgrade	Network	2,000,000	15,000,000
Wastewater JV	Renewal	Trunk Type B Network Development - Barber Grove to Wastewater Treatment Plant Duplication	Network	1,200,000	-
Wastewater JV	Renewal	Seaview WWTP UV Renewal Project	Treatment Plants	1,000,000	3,000,000
Wastewater JV	Renewal	VHCA-Western Hutt Trunk Sewer Renewal JV	Network	1,000,000	3,500,000
Wastewater JV	Renewal	HCC WWJV - Major Pump Stations PLANNED Renewals	Pump Stations	600,000	500,000
Wastewater JV	Renewal	HCC WWJV - Major Pump Stations REACTIVE Renewals	Pump Stations	400,000	300,000
Wastewater JV	Renewal	HCC JV WWTP Planned Renewals	Treatment Plants	300,000	300,000
Wastewater JV	Renewal	Seaview WWTP Spares	Treatment Plants	300,000	300,000
Wastewater JV	Renewal	HCC JV WWTP Reactive Renewals	Treatment Plants	200,000	200,000
Wastewater JV	Renewal	Seaview WWTP Odour Control Modification/Upgrade	Treatment Plants	150,000	250,000
Wastewater JV	Renewal	Seaview WWTP Aeration System Renewal	Treatment Plants	100,000	1,000,000
Wastewater JV	Renewal	VHCA-Rising Main PS241	Network	80,000	320,000
Wastewater JV	Renewal	Seaview Odour Control Modification/Upgrade	Control systems	20,000	100,000
Wastewater JV	Level of Service	Seaview WWTP Wastewater Storage	Treatment Plants	1,900,000	920,000
Wastewater JV	Level of Service	HCC Wastewater Trunk Resource Consent Renewals	Resource Consents	577,800	324,000
Wastewater JV	Level of Service	Seaview WWTP RAS System Modification and Replacement	Treatment Plants	500,000	1,000,000
Wastewater JV	Level of Service	Seaview WWTP Milliscreens Replacement	Treatment Plants	500,000	500,000
Wastewater JV	Level of Service	Seaview WWTP Backup Power Supply Project	Treatment Plants	200,000	500,000
Wastewater JV	Level of Service	Seaview WWTP Sludge Dewatering Renewal	Treatment Plants	150,000	300,000
Wastewater JV	Level of Service	Seaview WWTP Screening Wash Press Replacement	Treatment Plants	100,000	300,000
Wastewater JV	Level of Service	Seaview WWTP Effluent Pump Station Renewal	Treatment Plants	400,000	-
Wastewater JV	Level of Service	Seaview WWTP General Instrumentation Replacement	Treatment Plants	100,000	250,000
Wastewater JV	Level of Service	Network discharges programme: pilot subcatchment wastewater wet weather overflows reduction plan	Non-asset based	118,800	237,600
Wastewater JV	Level of Service	Seaview WWTP Process Model Development	Treatment Plants	200,000	100,000
Wastewater JV	Level of Service	Seaview WWTP Clarifier Renewal	Treatment Plants	100,000	100,000
				79,027,669	141,628,824

Purpose – Setting the scene for investment decisions in three waters for Hutt City

To outline the immediate and long-term challenges facing your three water assets and services; the nature of investment needed over the next 10 years; and seek your direction on the desired outcomes for water in your community



Recap on investment in three waters from the 2021-31 Long Term Plan

Over the first three years of the 2021-31 Long Term Plan period, Hutt City Council has progressively increased investment in three waters

In the last Long Term Plan, the Hutt City Council made decisions to focus on getting the basics right with significant investment in core infrastructure including three waters. This investment supported:

- Increased funding for asset renewals to avoid asset failures and disruption of services
- Providing infrastructure required for future growth
- Ensuring sustainable water supply for the future including provision for water meters, recognising their role as an important tool to identify leaks and reduce water consumption
- Improving the health of urban waterways
- the move towards zero carbon through reduced operational carbon emissions
- Making infrastructure more sustainable and resilient to the impacts of climate change

Thank you!

The information and evidence we have to inform the 2024-34 Long Term Plan has improved

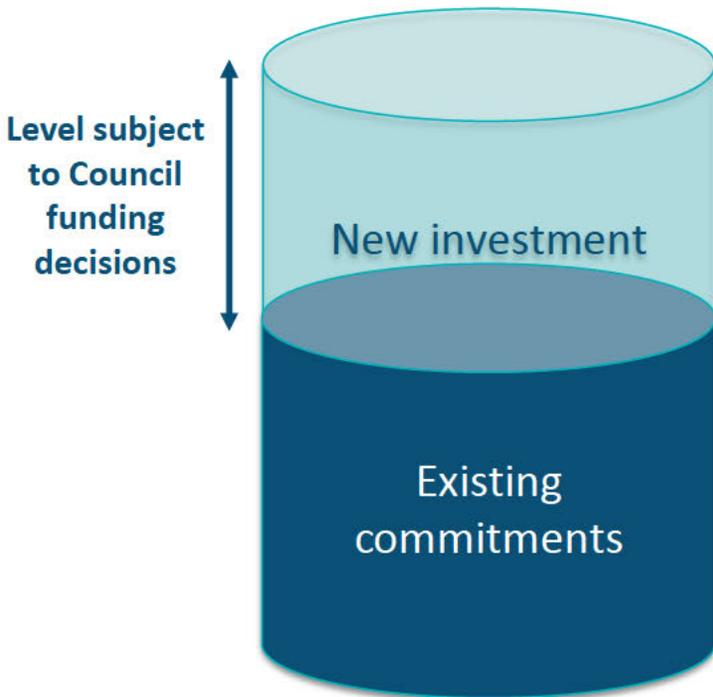
New knowledge gained, along with increased costs to meet levels of service, indicate that investment in three waters needs to increase

Since the 2021-31 Long Term Plan was developed, we have gained greater knowledge of Hutt City Council's three waters assets and future investment needs through:

- Asset condition and criticality assessments
- Hutt City Council Three Waters Growth Study 2022
- Regional sustainable water supply and demand strategy
- Global stormwater and wastewater overflow consents
- Refinement of the age based network and pump station renewals profiling
- New methodology for measuring and reporting on leaks and faults in the network
- Technical studies (e.g. material deterioration rates – which helped identify the issue with leakage from Galvanised Iron pipes)

Context for 2024-34 three waters investment decisions

The scale of three waters investment needed is significant and decisions made today will influence the activity that is delivered over the next ten years. Existing commitments will form the basis of investment in the short term.

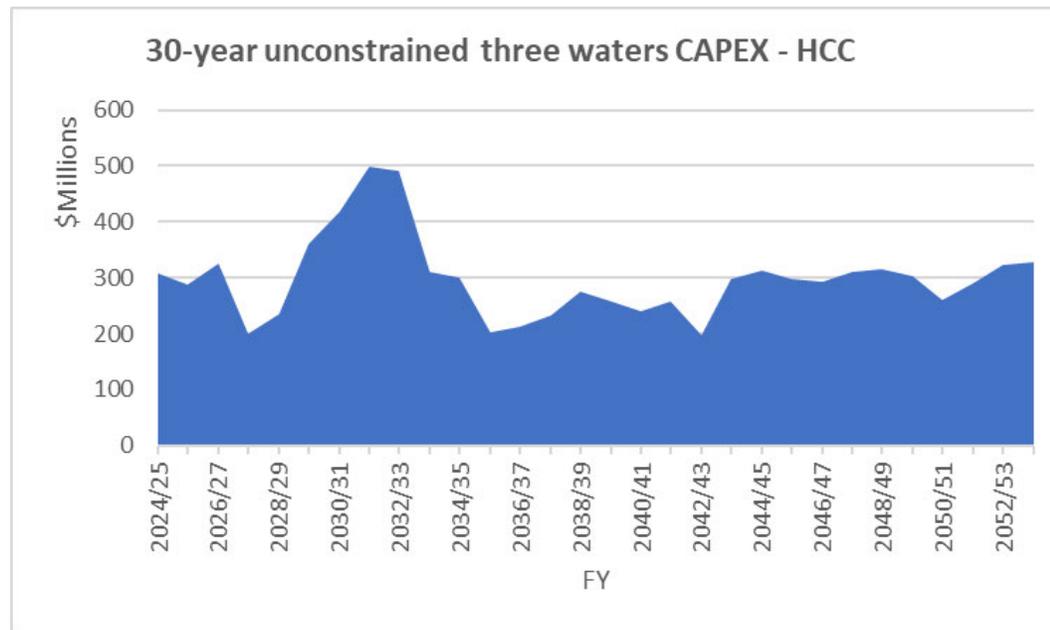


- Under legislation, Councils need to provide water services to their communities for up to the first two financial years of their 2024-34 Long-Term Plans (LTP)
- Decisions on ongoing funding and pricing will then be set by the new entity (year 3 onwards)
- Therefore, work already in progress will form the basis of the budgets for the first few years of the 2024-34 Long Term Plan
- Council direction on investment priorities will influence what work is investigated, designed and delivered in the longer term
- Decisions on levels of funding will influence how much 'new investment' can be achieved
- Costs associated with the bulk water levy will also form part of Hutt City Council's commitments

Context for 2024-34 three waters investment decisions (cont.)



Data collected for the NTU has provided a foundational, and unconstrained, view of the scale of investment need. While capital delivery has increased, there is a limit. Investment will be constrained by both delivery capacity and funding.



The graph shows forecast three waters capital works investment required for the next 30 years. This information has been provided to the NTU for its planning purposes in March 2023.

Caveats to note about this unconstrained 30-year view of Capital Expenditure:

- It is significantly greater than the current capital programme
- Would exceed the current capacity of the market to deliver
- The cost assumptions have formed the source inputs to the 2024-34 LTP, but are being updated to reflect current knowledge.
- The NTU submitted costs also include some duplications, where it is not yet clear which solution would be preferred

Five priorities guide 2024-34 investment planning



These priorities support Hutt City's vision of a connected, resilient and inclusive city where everyone thrives.

The region's three waters strategic priorities are:

- Looking after existing infrastructure
- Supporting a growing population
- Sustainable water supply and demand
- Improving environmental water quality
- Achieving net zero carbon emissions

We also need to ensure resilience to natural hazards and the impacts of climate change is reflected.

The Water Committee has re-endorsed these priorities from the previous 2021-31 LTP and the National Transition Unit is supportive of them.

Each of these areas presents major challenges if we are to achieve the outcomes desired by communities.

The headline challenges for water

Lower Hutt and the region face pressing issues for three waters

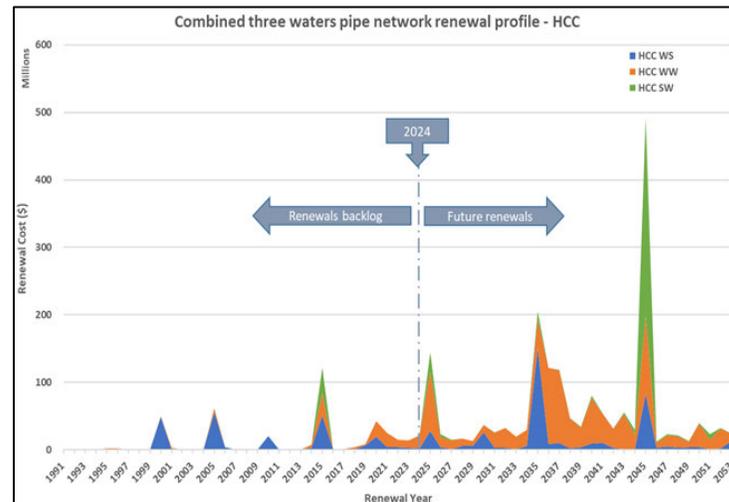
- ***Water assets are ageing at a faster rate than renewals.*** Historic underinvestment has resulted in aged infrastructure increasingly prone to failure
- We are facing ***acute water shortages***, with demand increasing while supply is becoming more vulnerable
- The extent and speed of ***urban growth is putting pressure on existing and future three waters infrastructure and services***, increasing the likelihood and consequences of network disruption and failing to meet performance expectations
- The ***quality of water in the environment must be improved*** to meet community expectations and regulations, but leaking, blocked or directly discharging stormwater and wastewater networks risk returning unsafe, contaminated water to the environment
- Risks from ***natural hazards and climate change are leaving communities and water assets vulnerable*** to disruption and economic loss

Water assets are ageing faster than they're being renewed

The desired state is where the reliability of the network improves and customers receive agreed levels of service across all three waters.

What do we know?

- Based on length, an age-based desk-top study estimates approximately 51% of Lower Hutt's pipe network assets are due for renewal within the next 30 years (~31.5km per year)
- While investment in renewals has increased, it is still below the rate necessary to reduce the growing backlog (14.5km delivered FY22/23)
- We know more about the very high and high critical assets through condition assessments and this will ensure renewals investment is targeted at the highest need assets



The peaks on the left of the dashed line represent renewals that didn't happen; those on the right represent renewals that should happen.

2024-34 investment need

- Continued investment in condition assessments and maintenance activities for the highest risk and priority very high and high criticality assets
- Significant and targeted replacement of the highest risk network assets using latest condition and criticality assessments to minimise service failures
- Year-on-year increase in renewals to address the renewals backlog and support the water loss strategy to maintain existing service levels
- Significant investment is needed at the Seaview Wastewater Treatment Plant to address compliance, capacity, and emerging issues

Metro Wellington is likely to face acute water shortages this summer and ongoing summers

The desired state is where water isn't wasted, supply meets demand, and customers and the network are more resilient in times of shortage

What do we know?

- Water use in the Wellington metropolitan area continues to increase and is at an all-time high, primarily due to water loss across the network
- Approximately 37% of water being supplied to the Lower Hutt community is being lost through leaks in the public network
- Our supply capacity is no longer sufficient to meet summer peak demand due to treatment and distribution constraints
- To implement Whitua recommendations, less water will be available during summer



Acute water shortages will mean increasing levels of water restrictions for residents

2024-34 investment need

Coordinated regional investment required over the next 10 years in:

- Water loss management activities such as leak detection and repair
- Demand management initiatives such as universal domestic water meters
- Additional storage capacity through the proposed Pākuratahi lakes

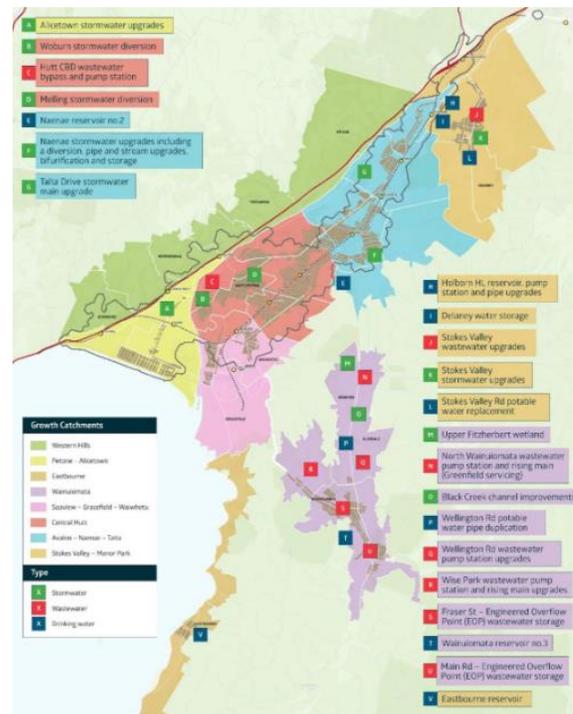
Urban growth is putting pressure on three waters services

The desired state is where growth can be achieved while ensuring target levels of service are met or exceeded

What do we know?

- A growth study completed late 2022 by Wellington Water forecast potential growth of 43% for HCC over 30 years (from 2021-2051)
- The study identified that there is a significant programme of investigative, design and physical works needed to meet the demands of future growth and bring existing networks to target levels of service
- The topography of the Hutt brings significant challenges for wastewater and stormwater
- Growth-driven initiatives typically also provide level of service benefits

Note: HCC has already approved \$174M within its budgets in water and wastewater growth works associated with Riverlink and the IAF programme



Location of proposed service improvements

2024-34 investment need

- Three waters investment in the order of \$1.27 billion will be required over the next 30 years to support the city's growth including:
 - New drinking water reservoir storage (Eastern Hills Reservoir)
 - New wastewater pump station and rising mains
 - Wastewater improvements to upgrade pipes, increase capacity and provide storage to address capacity constraints
 - Stormwater network capacity improvements and flood management
- Developers have a role to play in contributing to growth driven infrastructure needs

The quality of water in the environment must be improved

The desired state is improved water quality. Te Mana o Te Wai is enhanced; mahinga kai regenerates; regulatory requirements are met, No-Swim days are reduced

What do we know?

- Leaking, blocked or directly discharging stormwater and wastewater networks return unsafe, contaminated water to the environment
- Mana whenua iwi and our communities want our fresh and coastal waters to be healthy and clean
- The Government has put in place regulation that puts the health and wellbeing of water first, with Te Mana o te Wai at the heart of water management
- Global Stormwater Consent and Wastewater Network Overflow Consent have been lodged



Communities want to ensure that rivers remain swimmable. This will require substantial investment.

2024-34 investment need

- We need to change the way we manage stormwater and wastewater networks to reduce the frequency of wastewater overflows and reduce contaminants in stormwater entering the environment
- Improving the networks to support water quality targets will take decades and significant investment
- Ongoing investment to progressively implement the consents through activity such as:
 - source control and constructed wetlands for stormwater contaminants, and
 - inflow and infiltration programmes, storage tank, pump station and pipe upgrades, and treatment plant improvements for wastewater

The impacts of natural hazards and climate change are becoming more prominent

The desired state is where infrastructure and services adapt to the changing environment and corresponding land-use decisions. Carbon emission targets are met

What do we know?

- Stormwater flooding analysis shows that parts of Lower Hutt are subject to flooding
- Council has acknowledged there is a climate emergency and signed up to Net Carbon Zero by 2050
- Lower Hutt contributes around 20% of Wellington Water's operational inventory carbon emissions with most of these coming from the Seaview Wastewater Treatment Plant
- There are opportunities to reduce emissions when renewing assets



Community water stations are part of ensuring a resilient water network

2024-34 investment need

- To ensure 10-year level of service against flooding risk is achieved, investment in initiatives to address existing flooding issues in Lower Hutt is required
- Improve available information on flooded properties
- Continue to investigate opportunities to reduce carbon emissions from assets
- Through the Hutt Valley Joint Venture, continue to invest in climate change risk assessments and associated initiatives

Operational Expenditure

Council-owned three waters assets are ageing. This means they're not being renewed or replaced as quickly as they're wearing out, and means increasing issues and outages. Over time, this results in higher reactive costs including maintenance, repairs, and renewal. In response to this issue, Hutt City has increased its OPEX budgets.

- Operational expenditure activity includes:
 - Planned and reactive maintenance on all assets
 - Maintaining the systems needed to operate treatment plants, pump stations and valve assets
 - Investigations such as condition assessments, strategic studies, and some emergency investigations
 - Monitoring of consent compliance, water sampling and asset management
 - Indirect costs to manage three water assets on behalf of council
- As directed by legislation, the operational expenditure budgets recommended to council for the 2024-34 LTP, will ensure the levels of service currently planned to be provided this year, will at least be maintained
- For FY2023/2024, Hutt City Council approved Wellington Water's recommended three waters OPEX budget of \$29.974M to deliver agreed levels of service



Ageing networks break down more often, requiring more reactive repairs

Shaping your direction for 2024-34 three waters investment

We will be running an interactive session to identify the priorities that will be used to help shape proposed investment scenarios

Activity 1. Getting the renewal level right

During the presentation we will talk about Looking After Existing Infrastructure and renewing them as foundational to good asset management.

If we don't renew things before they fail, we increase the risk of harm to people and the environment, poor service and higher operational costs in the long run.

*Thinking about these risks and the other needs we outline, we seek to run an exercise to determine **Where would you like to see the renewal rate set? The same as last year? Less? Or higher?***



Activity 2. What else should we do?

*Thinking about the other priority areas – water shortage risk – environmental water quality – supporting growth – reducing carbon emissions (and noting that these outcomes are addressed through renewals as well), **Which two of these would you prioritise?***



Next steps

The process from here

9 October



November 2023

STEP 1.

Council briefing
on challenges
and priorities

STEP 2.

Council
direction on
detailed
investment
options

Preferred
programme
included in draft
LTP



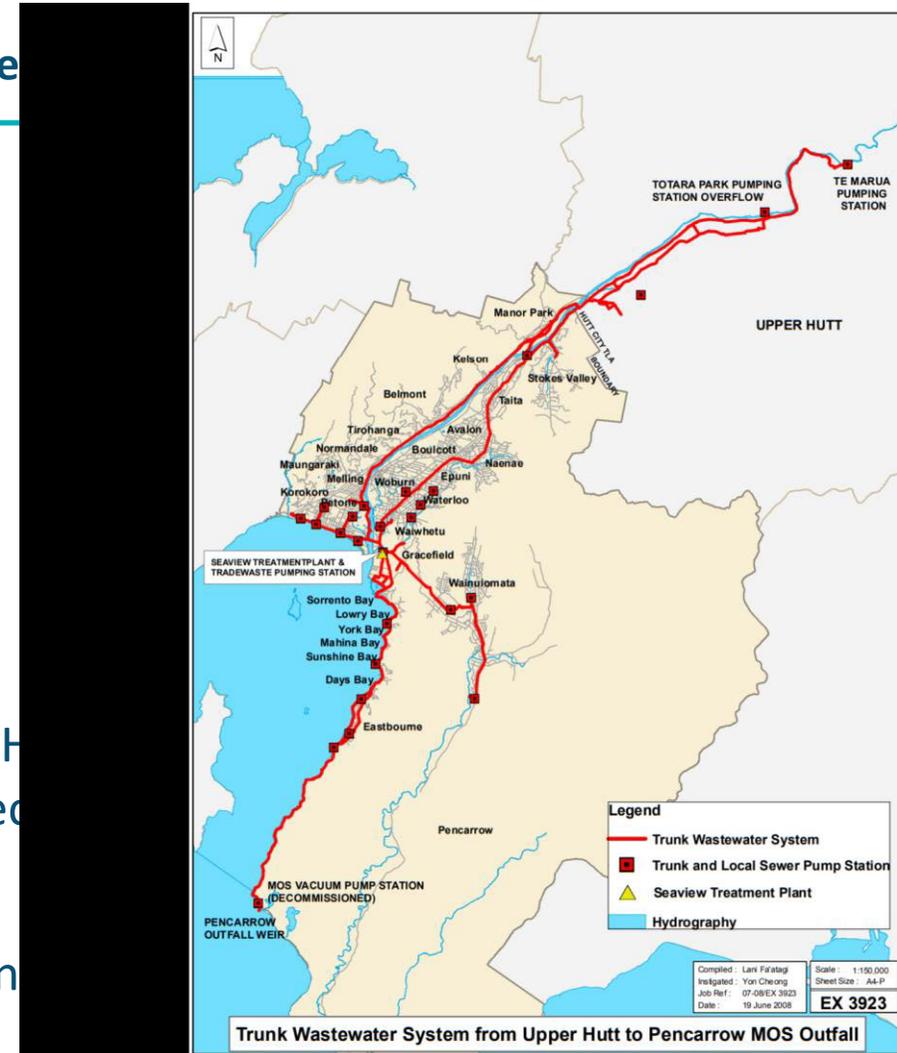
**Hutt Valley Trunk
Wastewater –
Long Term Plan
Investment Briefing**
Hutt Valley Services Committee

22 September 2023

Hutt Valley Trunk Wastewater System

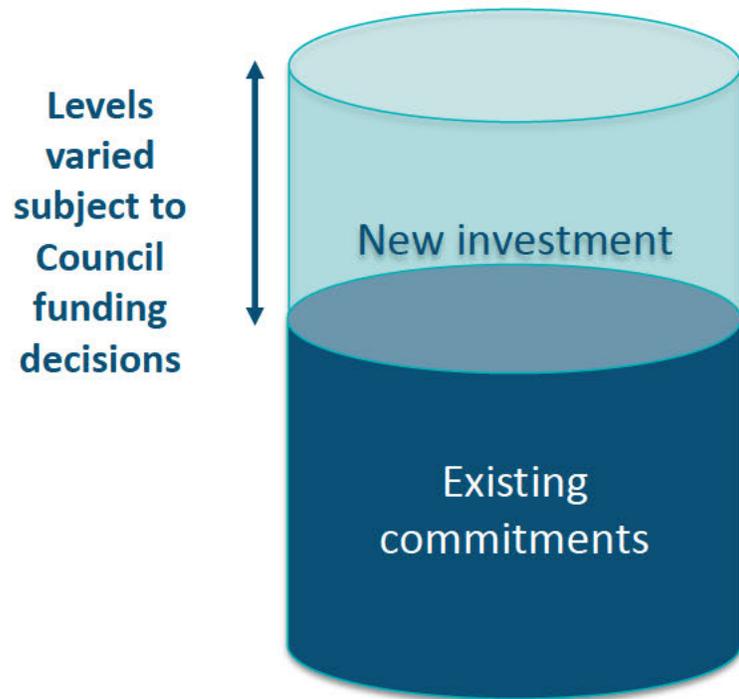
The joint wastewater system serves the two Councils – Hutt City and Upper Hutt

- Originally developed by the Hutt Valley Drainage Board, administered under the Hutt Valley Drainage Act 1967.
- The extent of the shared assets includes:
 - Approximately 95 kilometres of trunk pipelines
 - 24 wastewater pumping stations
 - Seaview WWTP and main pumping station
 - 18km Main Outfall Pipeline to Pencarrow outfall.
- Wainuiomata was incorporated into the system as part of the Hutt Valley & Wainuiomata Wastewater Design Build Operate project
- Wainuiomata portion is funded solely by HCC.
- The allocation of costs is recalculated annually – dependant on design capacity, water use and population.



Context for 2024-34 three waters investment decisions

The scale of investment needed in Hutt Region is significant, and decisions made today will influence the activity that is delivered over the next ten years



- Councils need to provide water services to their communities for up to the first two financial years of their 2024-34 Long-Term Plans (LTP)
- From year 3 onwards, decisions on ongoing funding and pricing will be set by the new entity
- Existing commitments will form the basis of investment in the short term
- Costs associated with the Hutt Valley Trunk System will form commitments from both UHCC & HCC

The Long Term Planning Process 2024-2034

Due to the age of the networks, there are a number of major investment within HVJV which needs to be considered in the upcoming LTP.

- The Long Term Planning process is currently underway and significantly more requests for projects have been made than current funding, or even the market deliverability.
- Under the Water Services Act, the Department of Internal Affairs National Transition Unit is effectively responsible for the 2026/27 and beyond years.
- A new prioritization tool for 2026 onward is being developed, liaising with councils on investment planning will be required.
- Cost estimates have increased significantly since 2021 LTP, under pressure from market inflation, revised approach to cost estimation and temporary work requirements.
- Not all of the investment proposals will not be able to be delivered, and the risk of not delivering them within recommended timeframes will have to be considered carefully.

Seaview Wastewater Treatment Plant Overview

Services the Hutt Valley, Wainuiomata and Eastern Bays population of approximately 160,000 and treats 60 million litres /day

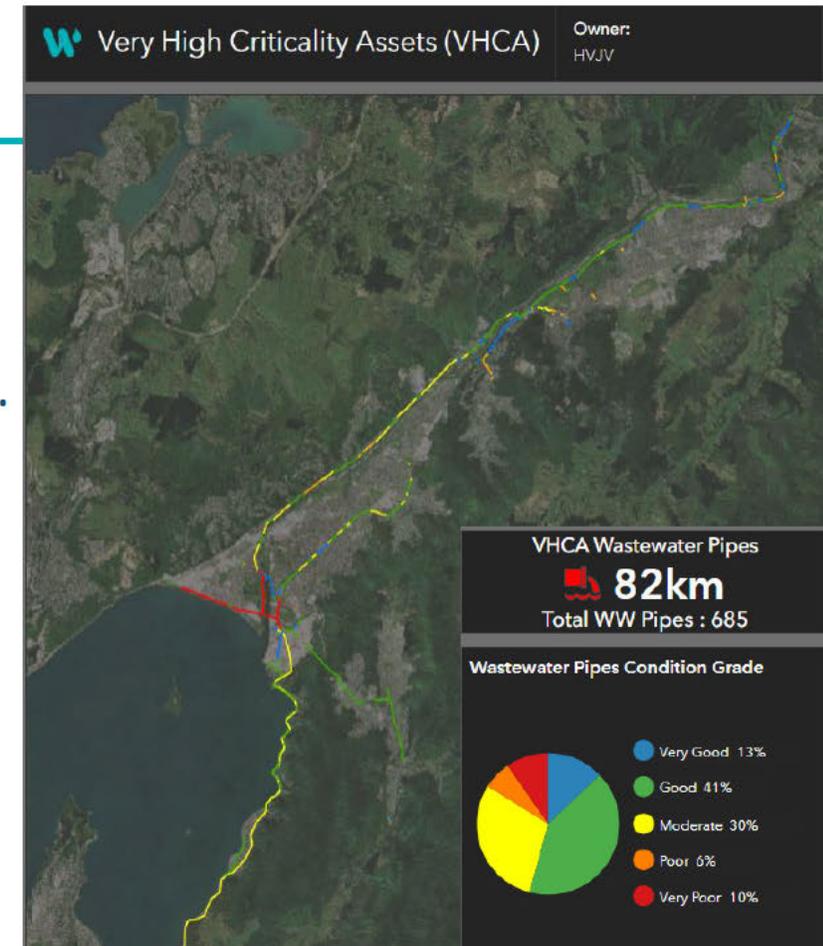
- Receiving wastewater since 1962
- Milliscreening since 1984
- Secondary & UV treatment since 2002
- Large site on reclaimed ground, low lying
- 18km pipe to Pencarrow outfall
- Wet weather and maintenance bypass to Waiwhetu Stream (fully treated)
- Sludge dryer on site, disposed at Silverstream landfill



Key issues – Investment is needed in the Network

Due to the condition of the network, there are a number of major renewal investments that need considering in the upcoming LTP. Increasing environmental requirements from Natural Resources Plan are also emerging.

- The Main Outfall Pipeline is the largest investment uncertainty, driven by consenting and water quality more than condition.
- The Petone Collecting Sewer is the main network renewal priority.
- The Ava Branch Sewer from Wakefield Street to the Esplanade is also considered poor condition.
- Some sections of the main gravity trunk mains have sections in poor condition.
- Whaitua plan changes will require network overflows to be reduced significantly over the coming years which may also require trunk network capacity upgrades.



Change will be required for Treated Wastewater disposal

The 18km Main Outfall pipeline has been operating since 1962 and performance requirements are increasing to meet environmental and growth needs. The current bypass of the MOP to Waiwhetu Stream requires improvements to consent.

- There has been about one leak per annum since it was built, the outfall leaks may be increasing again, with three last year. Each leak requires bypass for approximately 1 week.
- Has had its maximum operating pressure lowered twice in order to reduce leak frequency.
- The capacity of the pipeline is further overloaded as increased wet weather flows are sent from Silverstream Storage Tank and from Wainuiomata to reduce wastewater overflows in the network.
- Growth projections in the Hutt Valley mean that significant increases in overflow frequency are expected.
- Maintaining the existing system will not be sustainable in the medium term.

Duplicating or Renewing Main Outfall Pipeline is complex

Renewing the pipeline to the Pencarrow outfall is being considered. Alternatives to the outfall will also be considered. Outcome is safe and appropriate disposal of treated wastewater from the Hutt Valley.

- Initial concept work on alignment has identified three options for renewal
- Comparative estimates in 2022 ranged between \$546M and \$658M at Level 1 estimate
- Temporary outfalls are required for any work on the existing alignment
- Existing route is vulnerable to erosion
- Harbour pipeline is current preference
- Capacity would be increased
- Alternatives will need to be considered
- Further investigation needed



Replacing the Waiwhetū overflow consent is complex

The Waiwhetū overflow pipe is used when the Main Outfall Pipeline capacity is reached and when the MOP is off-line for joint repairs or maintenance. Reducing network overflows and population growth may send even more flow to Seaview.

- A consent application for Option 2 was lodged in 2017
- Updated growth flow projections mean that application is on hold while options are reconsidered
- 2017 proposal to extend the Waiwhetu overflow and build 10ML storage now estimated to cost around \$40M
- Mana whenua have advised that removal of current discharges from Waiwhetū Stream is expected
- Replacing the MOP with larger pipeline would achieve this
- Other alternatives need to be worked through
- This needs to be considered alongside the wider issue of network overflows



Options assessed in 2016, existing overflow in yellow

Key issues – Investment in Seaview Wastewater Treatment Plant

Due to the age of the plant, there are a number of mechanical and electrical plant items which are at or near the end of their design life and require renewal.

- The sludge dryer is the largest WWTP investment required. The current dryer is approaching the end of its design life, and is breaking down once or twice a year.
- Other major mechanical equipment at Seaview at or approaching the end of their design life which are critical to ensure compliance, including sludge thickening, aeration system, UV disinfection, odour control, return sludge pumping, clarifier mechanisms, instrumentation and other equipment.
- Obsolescence and long lead times make repair quite difficult and replacements are planned. Assets can be replaced as reactive renewals but often at higher cost when fast tracked and additional spend on extending service or temporary service, e.g. trucking undried sludge.

The Sludge Dryer is at end of life and requires replacement

The sludge dryer is requiring replacement due to capacity constraint and is reaching the end of its design life, the estimated 2024 LTP budget has increased to \$112M.

- Comparative estimates were prepared in 2022 for four options which ranged between \$73M and \$114M at a level 1 estimate.
- Key objective of the project is that the replacement dryer has lower carbon emissions, with the existing natural gas being the largest single source emission in Council control.
- The replacement needs to have capacity to accommodate for expected future growth.
- Work is underway with Council officers to investigate future pathways for the beneficial use of biosolids to move away from landfill disposal.



Investment in Seaview Wastewater Treatment Plant

The treatment plant consent requires renewal in the upcoming LTP. Growth is being planned for. The Seaview site is vulnerable to long term sea level rise and will need to consider land use planning.

- Renewals are sized for growth when they are undertaken.
- The discharge consent for the WWTP expires in 2031.
- Timely asset renewals will support treatment performance, important to demonstrate reliable performance for consent renewal
- Expenditure is also needed to increase treatment capacity, to improve discharge quality at higher population flows.



Proposed Investment List for the Hutt Valley Trunk Wastewater Network

These major investments are an overview of projects, in order of value and are yet to be prioritised.

Project	2024 – 2034 Estimate	Recommended timing
Main Outfall Pipeline renewal & capacity increase	\$700M	2024 - 2033
Seaview Dryer renewal	\$112M	2024 - 2028
Petone Collecting Sewer	\$55M	2024 - 2028
Assorted mechanical renewals	\$32.6M	2024 – 2034
Solids handling renewal & upgrade	\$29.75M	2029 – 2034
Consent renewal related upgrade	\$25.5M	2029 – 2034
Pump station renewals	\$24.8M	2024 – 2034
Odour control renewal & upgrade	\$16.5M	2024 – 2027
Planned WWTP renewals – site wide	\$11.5M	2024 – 2034
Grit removal upgrade	\$8M	2028 – 2032
UV renewal	\$7.5M	2024 – 2026
Reactive WWTP renewals – site wide	\$5M	2024 – 2034

Note – other network renewal projects are still being collated, previous unconstrained advice to NTU included a total of approximately \$66M

Overview of Hutt City Council's Three Waters Renewals

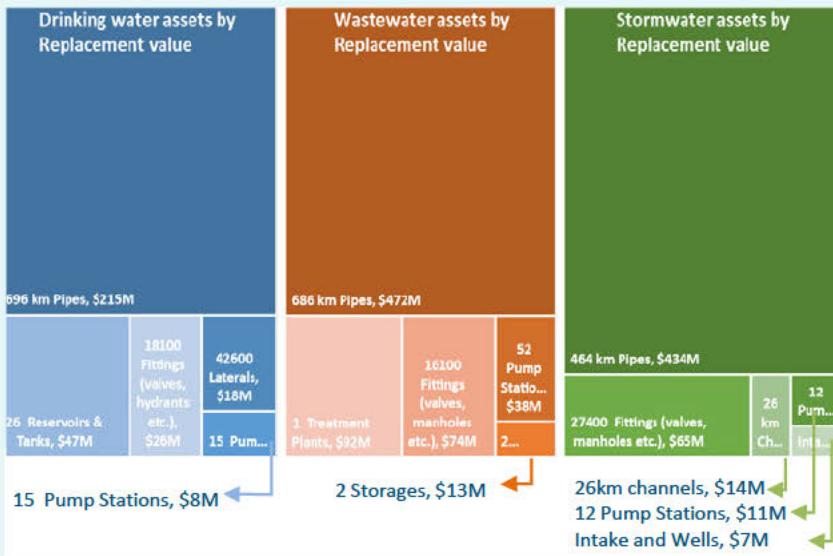
Handout for Activity 1: Getting the renewal level right (Workshop 13 September 2023)

VALUE OF HUTT CITY'S THREE WATERS ASSETS

Optimised Replacement Value of HCC's three waters assets*:

Drinking Water	\$314M
Wastewater	\$688M
Stormwater	\$531M
TOTAL Three Waters	\$1,533M

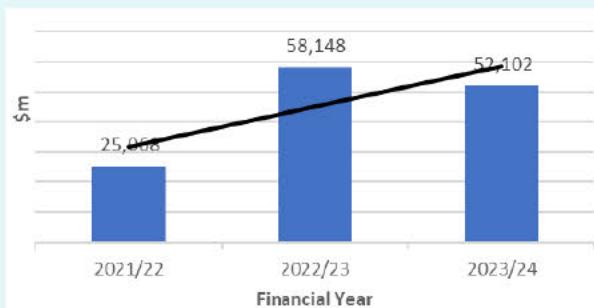
*Optimised Replacement Value reflects the current and most economic cost of replacing an asset that provides a similar level of capacity and/or service.



Figures based on:

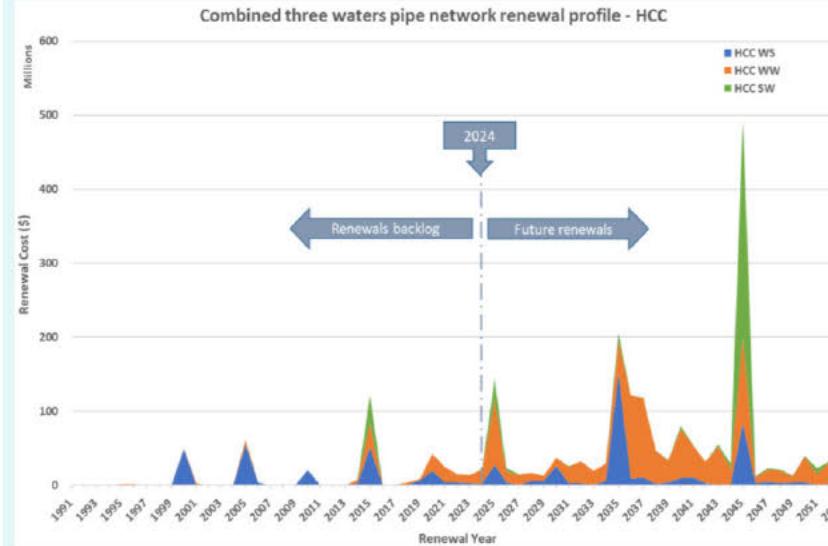
- March 2023 Asset quantities
- HCC June 2022 Valuation values (these may not reflect the actual renewal cost of assets)

YEAR-ON-YEAR RENEWALS INVESTMENT



BACKLOG OF RENEWALS

Pipes



Total length of HCC's pipe assets	1,836km
% Critical	22%
% Non-critical	78%
Length needing replacement within the next 30 years (excl. laterals)	946 km (51%) (~\$2,205M)
Average replacement length needed per year (excl. laterals)	31.5km (~\$73.5M)
What was delivered 2022/23	14.5 km

Pump Stations (all waters)

Renewals Backlog	\$1.710M
Renewals required within the next 30 years (incl. backlog)	\$34.405M

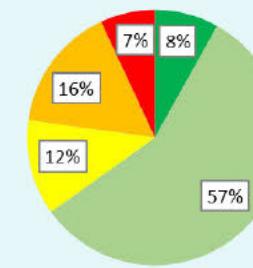
^HVJV Treatment Plant and Pump Station renewals information not provided

CONDITION

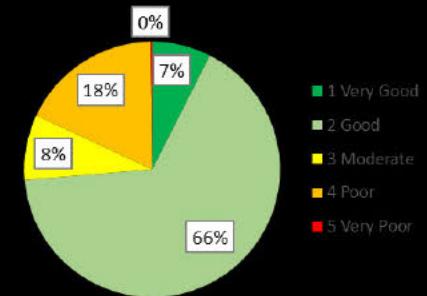
100% of HCC's three waters pipe network has had a criticality assigned and condition assessed either via physical or desktop assessment.

Critical Assets

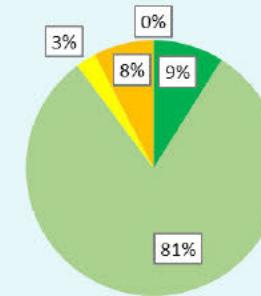
Critical drinking water pipes (% of total length)



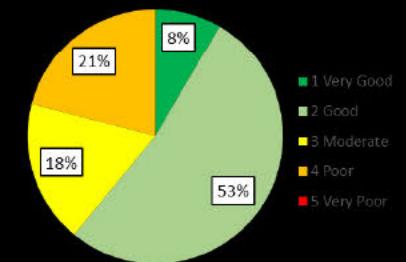
Critical wastewater pipes (% of total length)



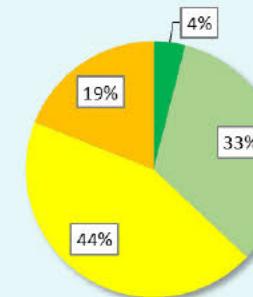
Critical stormwater pipes (% of total length)



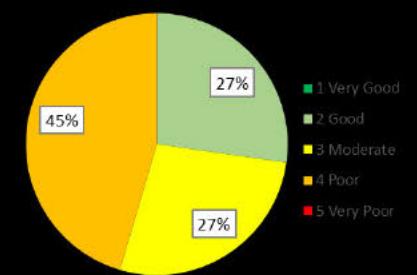
Critical HVJV wastewater pipes



Critical drinking water facilities & 25 Reservoirs



Wastewater pumpstations (11)



Note, reservoirs based on structural condition only, excludes contamination risks



2024-34 Investment Planning and Advice

Hutt City Council

Step 2: Council direction on
detailed investment options

9 October 2023

Purpose and outcome sought

Supporting Hutt City Council's vision of a 'connected, resilient and inclusive city where everyone thrives'

This advice is to present options with indicative budget levels, high-level activities and risks, for investing in your three waters assets and services. It is intended to assist you, as part of a staged process, in developing and making decisions on your 2024-34 Long Term Plan.

Wellington Water seeks your direction on:

- Council's affordable funding level for three waters assets and services
- Council's preferred option for investing in three waters assets and services

Recap – Where we are at in the process:



Five priorities guide 2024-34 three waters investment

The Wellington Water Committee has endorsed for inclusion in the 2024-34 investment planning advice for each council, the following regional strategic priorities. These priorities are a continuation of the investment direction for the region established in 2021-31 Long-Term Plans.

The region's three waters strategic priorities are:



Looking after existing infrastructure



Supporting a growing population



Sustainable water supply and demand



Improving environmental water quality



Achieving net zero carbon emissions



Each presents major challenges:

Water assets are ageing faster than rate of renewals

The extent and speed of growth is putting pressure on existing and future three waters infrastructure and services

We are facing acute water shortages, with demand increasing while supply is becoming more vulnerable

Blocked or directly discharging stormwater and wastewater networks risk returning unsafe, contaminated water to the environment

Risks from natural hazards and climate change are leaving communities and water assets vulnerable to disruption and economic loss

We also need to ensure resilience to natural hazards and the impacts of climate change are reflected.

Context and assumptions to investment options

We have framed our advice to reflect the maximum we consider can be delivered over the 24-34 investment period. This will be different to what is affordable to Council. We appreciate that Council will be facing financial pressures across all of its budgets and any increase in funding to your three waters assets and services will need to be considered alongside other Council priorities. The budgets proposed in this advice will be refined over the next stages of developing your LTP

- Under current legislation, Councils are required to provide water services to their communities for the first two financial years of their 2024-34 LTPs. Decisions on ongoing funding and pricing will then be set by the new Water Services Entity (year 3 onwards)
- We have provided a 10-year view of investment to ensure consistency and alignment between your LTP and transition to the new entity – the investment programme we would recommend would be the same regardless of who was making the funding decision
- Work already in progress and contractually committed forms the basis of budgets for the first few years of this 10-year period. However, decisions made by Council will influence the work that is investigated, designed and delivered in the longer term through the new entity
- Since the previous long-term planning process, we have delivered year-on-year increases across Capex programmes. While inflationary pressures have driven some of this increase, past performance shows a very strong record of growth in delivery where funding has been made available by our owner Councils
- Our advice continues this growth trend. Based on previous growth and market responsiveness to increased investment across our client councils, it is considered feasible that we could deliver 30% year on year increases, or approximately \$100m, over the next three years and beyond (subject to a number of assumptions). This represents the maximum we consider can be delivered across the region
- Despite the uplift in investment and delivery, there is more work than can be done even within a 30 year time frame.
- We have prioritised our recommended work programme based on:
 - The region's strategic priorities for water
 - Our recommendations on what is of most importance (in terms of risk) and is of highest criticality
 - What we have heard from you on your priorities
 - Compliance, consenting and regulatory requirements, as well as human health and safety needs that must be met
 - Increases needed to maintain current levels of service and to mitigate risks

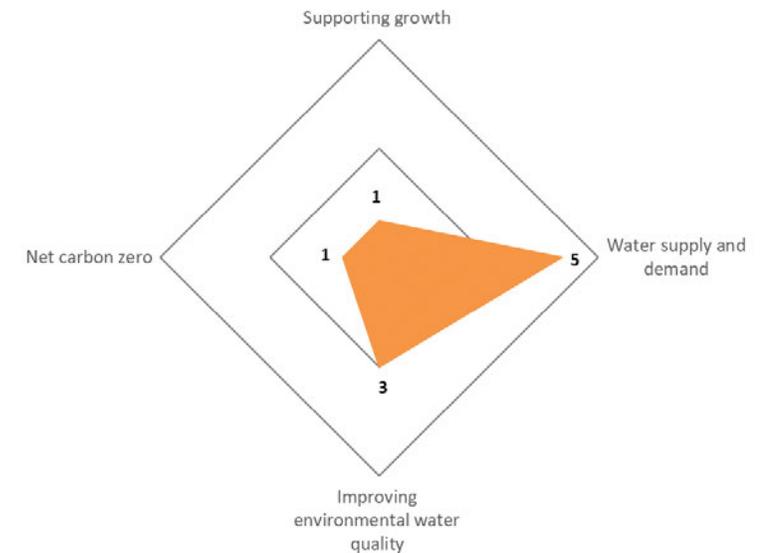
What we have heard

On 13 September 2023 we met with you to: outline the immediate long-term challenges facing your three water assets and services; understand the nature of investment needed over the next 10 years; and seek your direction on the desired outcomes for water in your community.

During the discussion we heard:

- Council is running a parallel process to the Water Reform Programme, assuming delivery of three waters for the full 10-years of the LTP
- Support for water meters with questions around the value of delivering these sooner to address challenges with leaks
- Support for a regional approach to delivery to create efficiencies, particularly for large projects
- A targeted list of critical assets requiring renewals immediately and identifying where renewals can be added to the backlog
- The level of renewals investment should be targeted to match depreciation

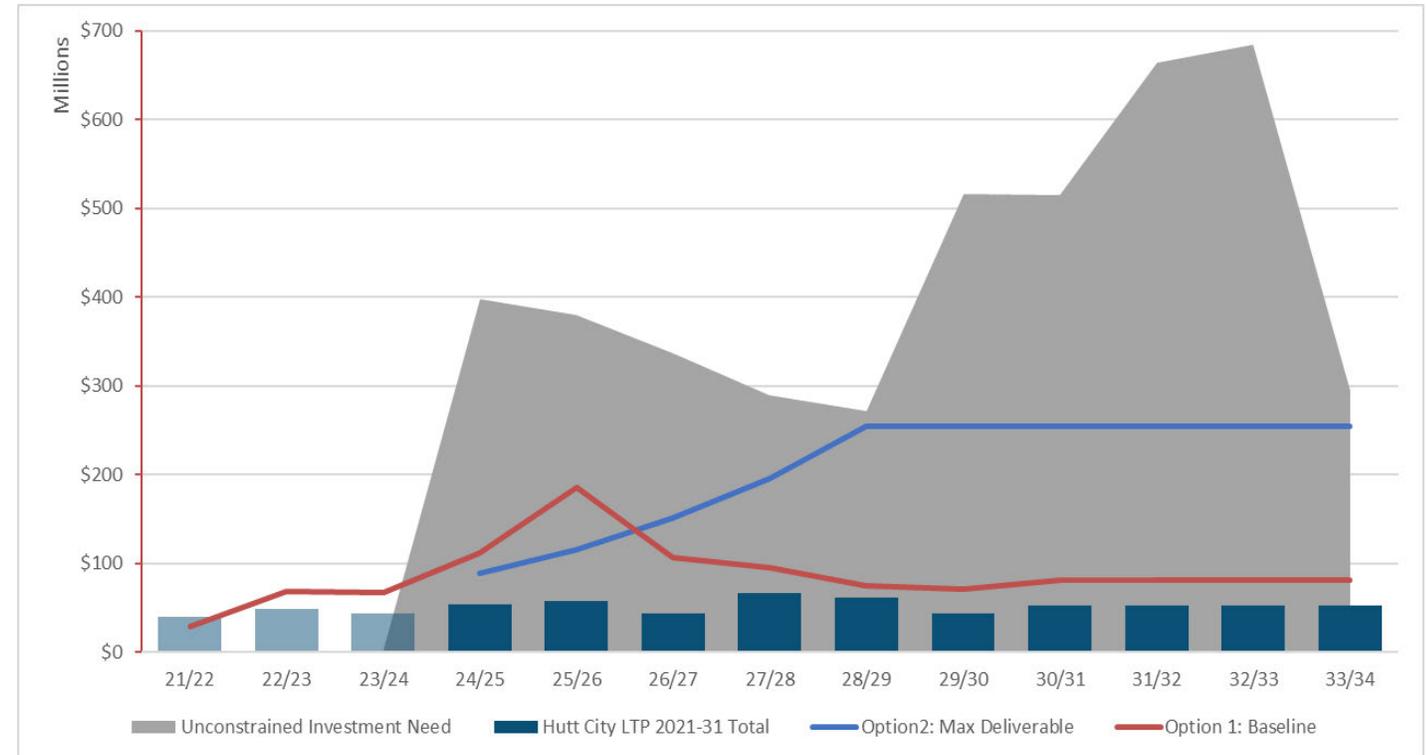
Water supply and demand was identified as a priority, followed by improving environmental water quality



Summary Overview

The following chart summaries Wellington Water's investment story for Hutt City.

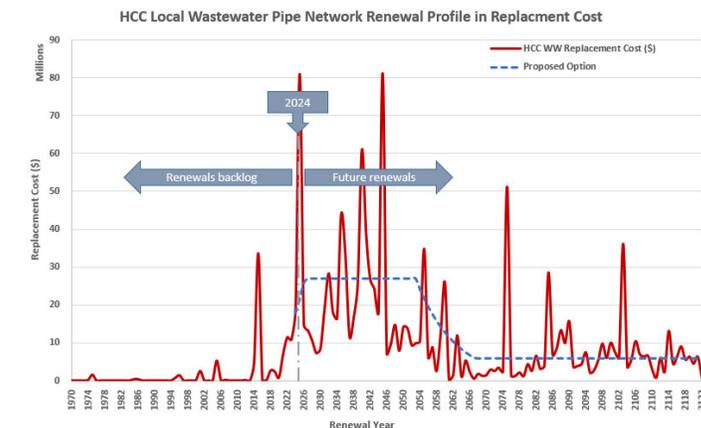
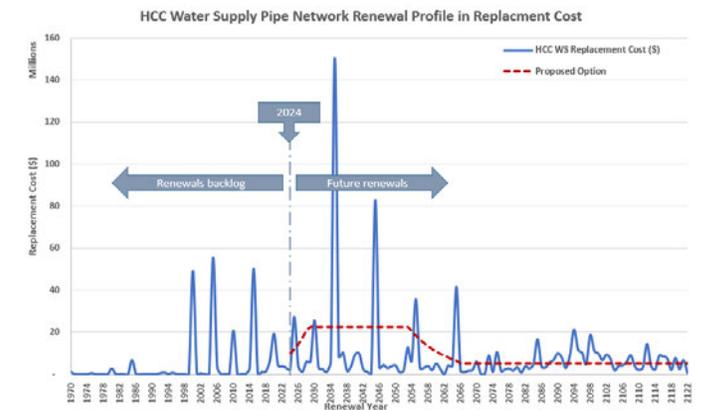
- The unconstrained investment need (grey) represents the total investment considered necessary for operating, maintaining and meeting current and future water services needs. This level is more than what Wellington Water can deliver and what is affordable to Council. Therefore, decisions are needed on what to prioritise. All Councils are facing this challenge.
- The baseline programme (red line) reflects adjustments HCC has made to the 21-31 LTP budget levels
- The maximum deliverable (blue line) is the level of investment Wellington Water considers it can deliver (HCC's proportional share of a regional deliverability view)



Renewals

Renewals are one solution to looking after existing infrastructure. Despite an uplift in renewals expenditure, the average age of the asset base continues to increase. To assure agreed levels of service and to operate within agreed risk tolerances, the required state is to continuously renew assets at the same rate as they deteriorate.

- Specific renewals budgets are proposed aimed at achieving a sustainable asset base that is renewed at a pace that matches deterioration. These budgets have been built from:
 - Requirements for treatment plants, reservoirs and storage, pump stations and pipe networks
 - Looking at forward requirements over the lifecycle of the asset base
 - Retain a level of budget for reactive renewals (based on history) to ensure that failed items can be replaced immediately
- To note:
 - Renewals needs are heavily dominated by pipe networks.
 - The recommended programme has been prioritised to achieve a balance between critical and non-critical assets
 - Deferral of renewal projects that make up the proposed budgets will lift the risk of increased service failures resulting in interrupted water supply and continued leakage, and unplanned overflows from wastewater pipes as well as elevated health and safety risks arising from collapsed or failed assets. Consequential rise in unplanned maintenance expenses



Operating Expenditure

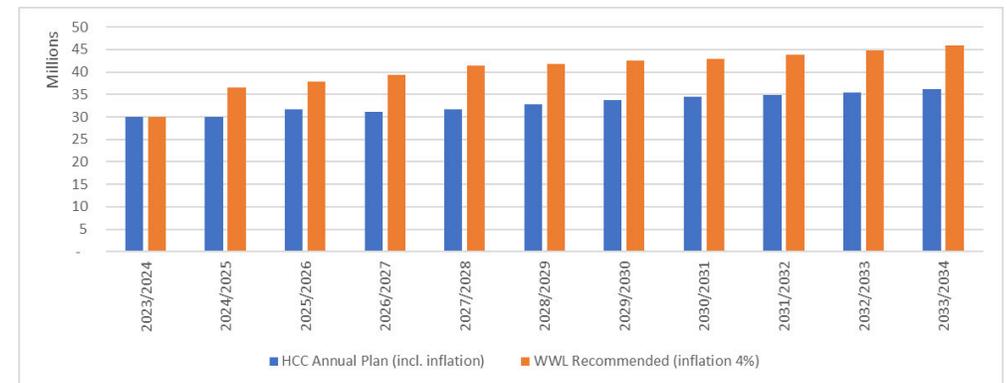
Within OPEX budgets there are a number of activities considered unavoidable that need to be covered by Council. These relate to activities that are mandatory or cannot be avoided or deferred as they are essential for the operation and maintenance of Councils assets. For example, costs required for the day-to-day operation of critical services where the consequence of failure is very high or for maintaining compliance with legislation, regulation, or industry standards.

There is some discretion predominantly within the budgets for Investigations and planned and reactive maintenance investment categories, however there are risks in with any reductions or deferrals with expenditure likely be required in the future.

High-level factors influencing Council’s recommended 24-34 OPEX budgets:

- Impact of inflationary factors driving up the cost of materials, labour, services, and utilities costs
- The need to urgently repair ageing infrastructure resulting in higher operational costs.
- Impact of the bulk water levy, which hasn’t been included in our advice, but will need to factored into HCC considerations – we are speaking to the Greater Wellington LTP Committee late October.

Proposed 24-34 operating expenditure against baseline (from 23/24 annual plan)



Recommended 2024-34 Operating Expenditure



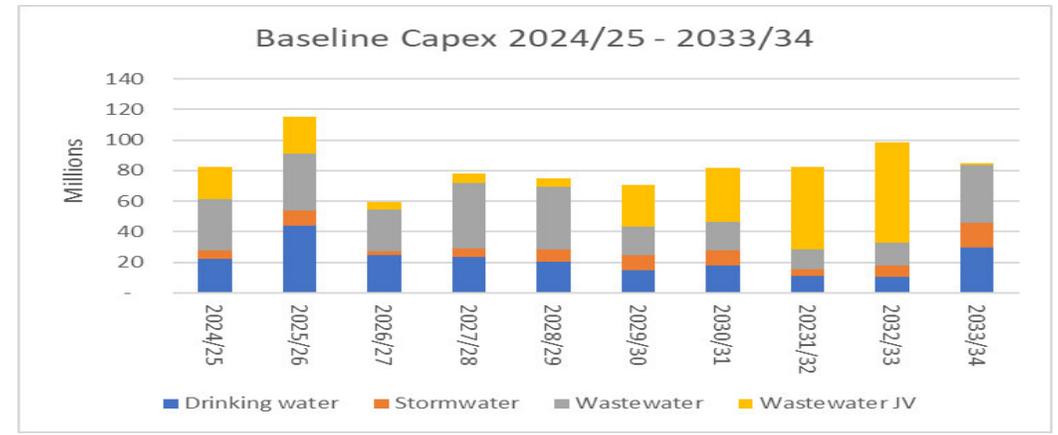
Proposed OPEX for 24-34 by investment category

	23/24 Baseline	Year 1 (24/25)	Year 2 (25/26)	10-year total	Drivers for investment
Monitoring & Investigations	\$5,459M	\$6.426M	\$7.085M	\$78.245M	Includes activities such as condition assessments, resource consent compliance monitoring, water sampling and monitoring, investigations, design studies, and asset management. Uplift on 23/24 budget levels due to: <ul style="list-style-type: none"> • Critical Asset Condition Assessments – physical pipe inspections and to pick up high criticality assets going forward, pump station asset management documentation and action and smart response plans, and testing of critical pumps • Increased active leakage control and water loss management – based on increased levels of service to get on top of growing leaks (7% yearly increase) • Catchment growth planning • WWJV Emissions monitoring (new activity) • Regional Biosolids management – strategy and plan for the beneficial reuse of wastewater biosolids
Operations	\$0.202M	\$0.238M	\$0.238M	\$2.523M	Includes the control systems covering the electrical, instrumentation and automation systems for Council’s stormwater, wastewater, and potable water assets. Uplift on 23/24 budget levels to account for increased labour and plant allocations.
Planned Maintenance	\$3.764M	\$4.683M	\$5.537M	\$63.581M	Includes water and wastewater pump station, utility and network asset maintenance, and stormwater maintenance activities. Uplift on 23/24 budget levels due to: <ul style="list-style-type: none"> • Planned maintenance activities required across pump station, reservoir and network assets
Reactive Maintenance	\$8.007M	\$9.510M	\$9.070M	\$103.454M	Reactive maintenance costs have been increasing based on failure trends experienced to date, the average age of assets and the anticipated resulting rates of renewal/replacement. For the 24-34 investment period, higher reactive maintenance budgets are anticipated due to ageing assets and to reduce the leakage rate.
Treatment Plant	\$8.377M	\$10.139M	\$10.231M	\$102.809M	Covers all activities relating to the operation of the wastewater treatment plant including planned and reactive maintenance, operations, and investigations. The majority of the recommended increase for the 24-34 period is from increased flows, a new gas contract starting in October 2023, anticipated increases in power costs, residuals disposal costs, and variation of Veolia contract conditions.
Management & Advisory Services	\$4.164M	\$4.164M	\$4.164M	\$41.643M	<i>NB. Does not include allowances for required investments in WWL systems and people in the event that transition to Entity G does not occur.</i>
TOTAL	\$29,974M	\$35.159M	\$36.325M	\$392.255M	

Summary Overview: Option 1 (CAPEX) – Continuation of LTP baseline

Option One represents a continuation of the current 2021-31 LTP, including any additions or adjustments made since.

Option One: Baseline				
	23/24 Budget	Year 1 24/25	Year 2 25/26	10-year total (\$m)
Drinking Water	\$25.771M	\$46.866M	\$45.953M	\$238.049M
Stormwater	-\$1.876M	\$3.68M	\$5.866M	\$170.258M
Wastewater	\$35.357M	\$31.662M	\$63.413M	\$391.374M
Wastewater JV	TBC	TBC	TBC	TBC
WWL Subtotal	\$59.251M	\$82.208M	\$115.231M	\$799.681M
IAF projects*	\$8.748M	\$30.005M	\$70.228M	\$174.467M
TOTAL	\$67.999M	\$112.213M	\$185.459M	\$973.548M



Risks

- Water demand outstrips supply due to water loss in the network and growth. Networks are not optimised in accordance with Te Mana o te Wai
- Ageing infrastructure impacting delivery of safe drinking water as well as having environmental and cultural impacts. Increased unplanned spend required to remediate critical failures
- Not maintaining baseline increases the likelihood of not meeting WSE Act 2021 obligations, health and safety standards, and impacting works already in progress

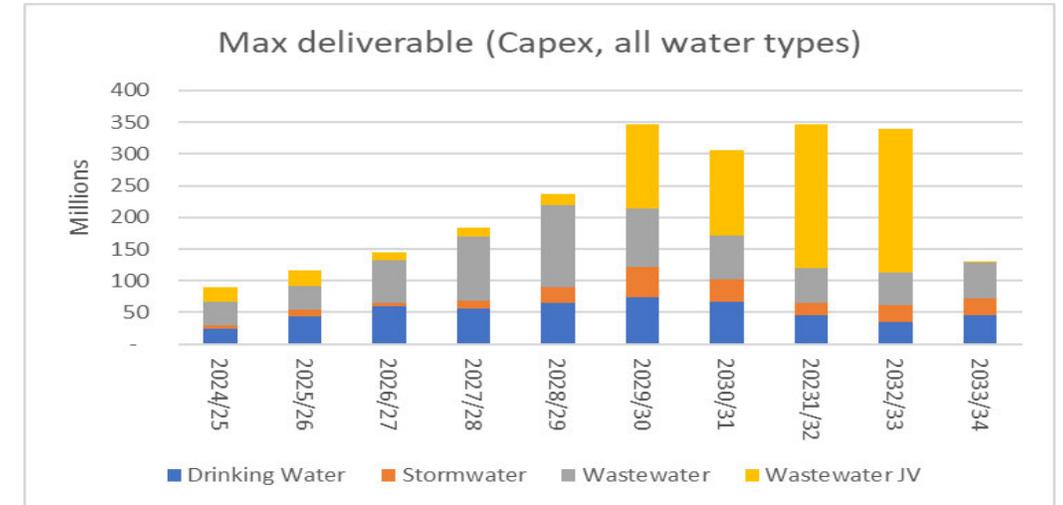
*Funding for IAF projects are not included within WWL budgets

Summary Overview: Option 2 (CAPEX) – Maximum deliverable

Option Two represents the maximum programme WWL recommends can be delivered irrespective of total investment need, affordability and other constraints outside of WWL’s control.

Option Two: Maximum deliverable

	23/24 Budget	Year 1 24/25	Year 2 25/26	10-year total (\$m)
Drinking Water	\$24.771M	\$24.318M	\$44.231M	\$514.937M
Stormwater	\$5.730M	\$10.153M	\$5.420M	\$217.640M
Wastewater	\$38.085M	\$36.436M	\$37.249M	\$692.098M
Wastewater JV	TBC	\$23.086M	\$24.555M	\$813.645M
WWL subtotal	\$68.586M	\$93.993M	\$111.445M	\$2,238.320M
IAF projects	\$8.748M	\$30.005M	\$70.228M	\$174.467M
TOTAL	\$77.33M	\$124.00M	\$181.68M	\$2,412.787M



Risks

- As with option 1 but lower
- Inflationary pressures putting pressure on scoped project budgets resulting in potential for rescoping projects, reallocating budgets from lower priority projects, or increasing budgets
- Potential for resource and supply chain constraints of both materials and personnel impacting the delivery of projects.

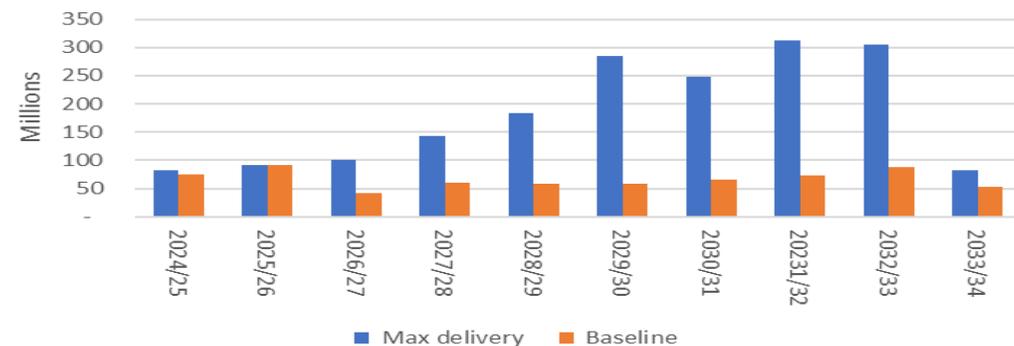
Proposed investment by strategic priority: Looking after existing infrastructure

Existing assets and services need to be operated, maintained, and replaced to ensure they deliver the services expected by customers. The desired state is where the reliability of the network improves and customers receive agreed levels of service across all three waters.

Option 1: Baseline (\$m)

Focuses on immediate risk where high likelihood of critical failure only. Partial lift in renewals to work towards elimination of backlog of end of life assets within 30 years

	Year 1 24/25	Year 2 25/26	10-year total
Drinking Water	\$21.3M	\$23.5M	\$138.5M
Stormwater	\$5.03M	\$7.5M	\$36.8M
Wastewater	\$29.0M	\$36.9M	\$248.4M
Wastewater JV	\$20.2M	\$23.9M	\$245.2M
TOTAL	\$75.3M	\$91.8M	\$668.9M



Option 2: Maximum deliverable (\$m)

Replacement of assets with known failure history or poor condition only within first 10 years, looks to replace waterpipes in high leakage areas, and seeks to lift renewals to achieve elimination of backlog of end-of-life assets within 30 years

	Year 1 24/25	Year 2 25/26	10-year total
Drinking Water	\$23.2M	\$23.6M	\$323.0M
Stormwater	\$5.5M	\$7.6M	\$97.0M
Wastewater	\$31.6M	\$37.2M	\$602.0M
Wastewater JV	\$22M	\$24.0M	\$812.0M
TOTAL	\$82.3M	\$92.6M	\$1,834.0M

Key projects: Option 1

- WW reactive renewals
- SW reactive renewals and Te Mome Pump Station renewal
- VHCA reservoir renewals
- DW reactive renewals

Option 2

- HVJV – upgrades to Seaview WW including Seaview dryer renewal and UV renewals and Petone Collecting WW upgrade and the main outfall pipe.

Proposed investment by strategic priority: Supporting a growing population



Water services exist to serve communities. As the number of people in towns and cities increases, the extent of water services must grow with them. The desired state is where growth can be achieved while ensuring target levels of service are met or exceeded

Option 1: Baseline (\$m)

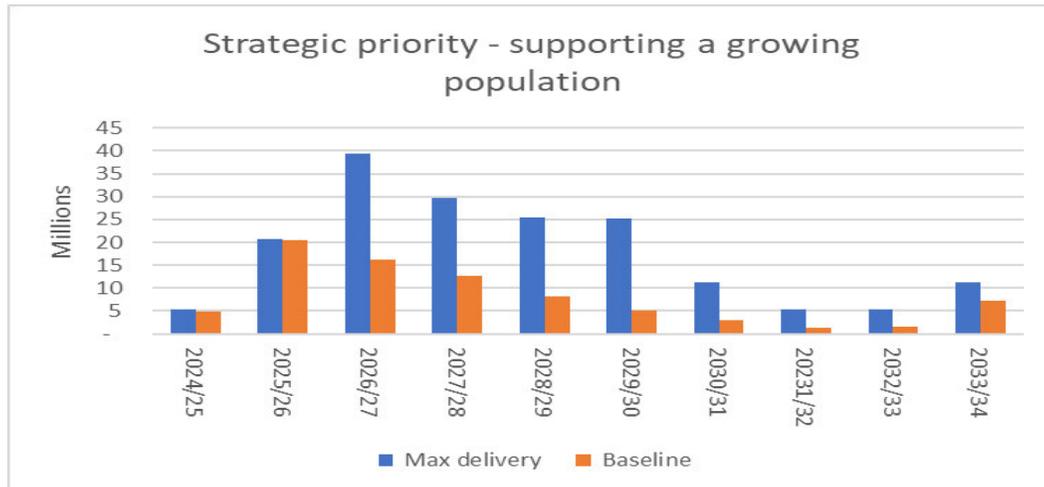
Minimal investment in growth projects.

	Year 1 24/25	Year 2 25/26	10-year total
Drinking Water	\$0.36M	\$20.2M	\$50.4M
Stormwater	\$0.23M	\$0.25M	\$11.3M
Wastewater	\$4.4M	-	\$18.9M
Wastewater JV	-	-	-
TOTAL	\$4.99M	\$20.5M	\$80.7M

Option 2: Maximum deliverable (\$m)

Significant investment in key infrastructure that supports growth in Lower Hutt

	Year 1 24/25	Year 2 25/26	10-year total
Drinking Water	\$0.39M	\$20.4M	\$95.6M
Stormwater	\$0.25M	\$0.25M	\$37.6M
Wastewater	\$4.8M	-	\$45.9M
Wastewater JV	-	-	-
TOTAL	\$5.4M	\$20.6M	\$179.0M



Key projects: Option 1

- Naenae no.2 Reservoir and Outlet Main
- Wainuiomata Black Creek SW

Option 2

- Wainuiomata North Wastewater Trunk Network Upgrade

Proposed investment by strategic priority: Sustainable water supply and demand

Our communities want to have enough water when they need it, while Te Mana o te Wai is enhanced by using it efficiently and leaving enough water in the rivers to sustain freshwater ecosystems. The desired state is where water isn't wasted, supply meets demand, and customers and the network are more resilient in times of shortage

Option 1: Baseline (\$m)

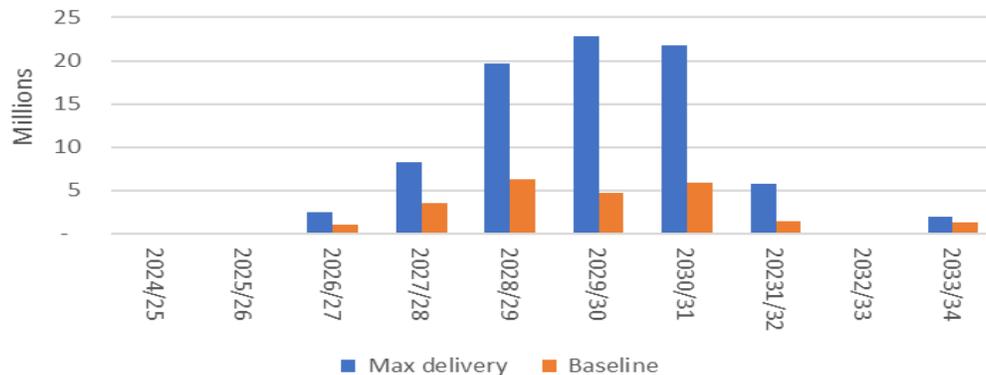
Provision for sustainable water supply and demand related activities.

	Year 1 24/25	Year 2 25/26	10-year total
Drinking Water	\$0.021M	\$0.149M	\$24M
Stormwater	-	-	-
Wastewater	-	-	-
Wastewater JV	-	-	-
TOTAL	\$0.021M	\$0.149M	\$24M

Option 2: Maximum deliverable (\$m)

The water needs of communities are met while maintaining the health and mauri/mana of the source water. Predominant focus on supporting measures to reduce water demand and water leakage to address regional water shortage challenge. Reflects full suite of measures required and updated cost assumptions.

	Year 1 24/25	Year 2 25/26	10-year total
Drinking Water	\$0.023M	\$0.15M	\$82M
Stormwater	-	-	-
Wastewater	-	-	-
Wastewater JV	-	-	-
TOTAL	\$0.02M	\$0.15M	\$82M



Key projects: Option 1

- Partial costs towards Smart Metering

Option 2

- Universal Residential Smart Metering

Proposed investment by strategic priority: Improving environmental water quality



Stormwater and treated wastewater are returned to the environment. Pollutants enter the water, making it unsafe for people and ecosystems. Stormwater management can also significantly modify the natural characteristics of creeks and streams. The desired state is improved water quality, Te Mana o Te Wai is implemented, mahinga kai regenerates, and regulatory requirements are met.

Option 1: Baseline (\$m)

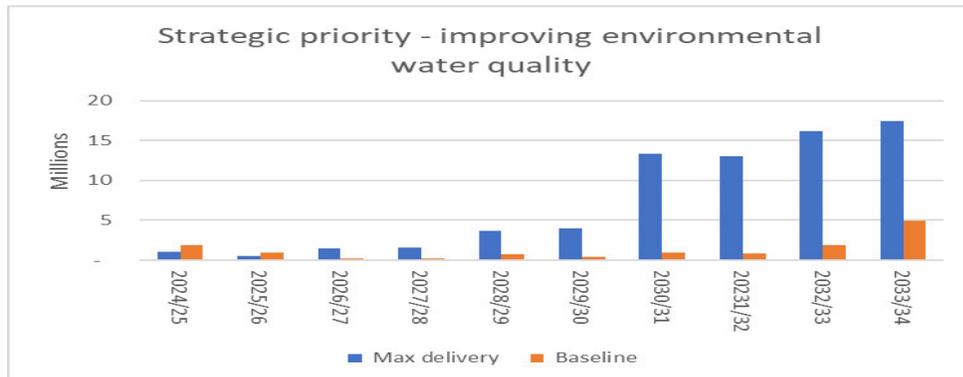
Provision for minimum level of activities to support improving environmental water quality. Does not reflect costs associated with global stormwater and wastewater consents. To note some activities delivering improved environmental water outcomes covered under Looking After Existing Infrastructure through renewals programme

	Year 1 24/25	Year 2 25/26	10-year total
Drinking Water	-	-	-
Stormwater	-	-	\$10.3M
Wastewater	\$0.03M	-	\$15.7M
Wastewater JV	\$0.93M	\$0.49M	\$1.4M
TOTAL	\$0.97M	\$0.49M	\$27.4M

Option 2: Maximum deliverable (\$m)

Major projects aimed at improving environmental water quality. The current consent process will result in changes to how SW and WW is managed. This programme supports UHCC in meeting new requirements.

	Year 1 24/25	Year 2 25/26	10-year total
Drinking Water	-	-	-
Stormwater	-	-	\$26.9M
Wastewater	\$0.038M	-	\$43.99M
Wastewater JV	\$1.02M	\$0.49M	\$1.5M
TOTAL	\$1.06M	\$0.49M	\$72.4M



Key projects: Option 1

- Stormwater and wastewater planning for future network improvements including:
- Wastewater overflow reductions programme
- Storm water quality improvements

Option 2

- Implementation of a sub catchment wastewater network overflow reduction plan.
- Stormwater Catchment Asset Management Plan – Implementation of water quality improvements

Increasing resilience to natural hazards and the impacts of climate change



Water services are at risk from natural hazards such as earthquakes and landslides and from more intense rainfall events and sea level rise caused by climate change. The desired state is resilient infrastructure that provides essential water services safely during an emergency event.

Option 1: Baseline (\$m)

Minimal activities aimed at ensuring resilience of water services following a major emergency

	Year 1 24/25	Year 2 25/26	10-year total
Drinking Water	\$0.6M	-	\$5.6M
Stormwater	\$0.005M	\$2.3M	\$21.6M
Wastewater	-	-	\$0.03M
Wastewater JV	-	-	-
TOTAL	\$0.62M	\$2.3M	\$27.2M

Option 2: Maximum deliverable (\$m)

Activities included aimed at improving network resilience

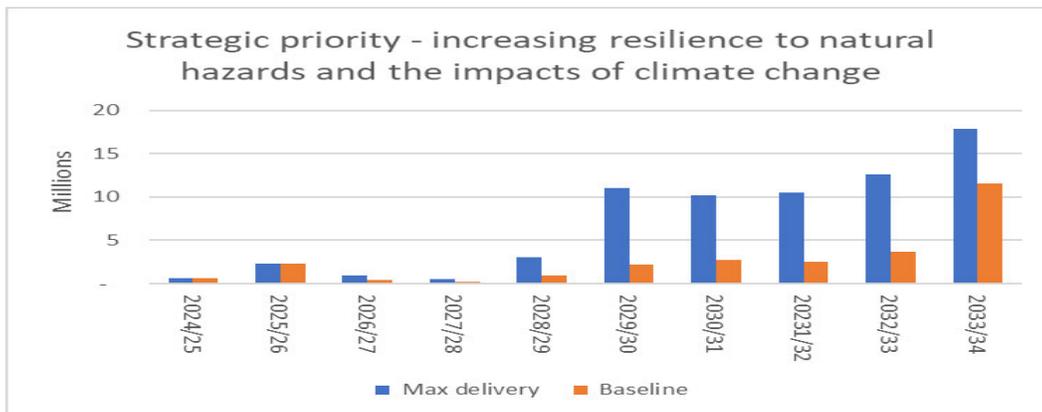
	Year 1 24/25	Year 2 25/26	10-year total
Drinking Water	\$0.68M	-	\$13.3M
Stormwater	\$0.005M	\$2.3M	\$56.3M
Wastewater	-	-	\$0.08M
Wastewater JV	-	-	-
TOTAL	\$0.7M	\$2.3M	\$69.7M

Key projects: Option 1

- Stormwater modelling projects
- Capital carbon modelling for three waters
- Dowse Drive and Muritai Road SW upgrades
- Fire Hydrant management and use project

Option 2

- Stormwater Projects for Petone Flooding



Next steps

The process from here





2024-34 Investment Planning and Advice

Hutt City Council

13 November 2023

Purpose and outcome sought

Provide options for three waters capital investment and seek your direction on the desired investment level



Seeking Council direction on three waters CAPEX budgets



To date WWL has presented a baseline budget and a maximum deliverable budget to Council. Now, WWL is seeking direction from Council on what an affordable three waters budget is for Hutt City CAPEX so the three waters programme can reflect Council's direction.

Capital Expenditure

- Council's three waters baseline CAPEX budget is lumpy in the first four years of the 2024-34 LTP period. For example, the year three budget is roughly half of the year two budget. To ensure continuity of projects underway, the CAPEX programme will be built to balance over the five years budget from FY2023/24 to FY2028/29.
- A budget below the maximum deliverable budget is expected to carry compliance, regulatory and health and safety risk. The scale of this will depend on where the final budget lands.
- We understand the funding constraints Council is under and appreciate the three waters programme needs to be weighed up against other Council budgets.

CAPEX options overview

WWL has worked with Council officers to present four CAPEX options for Council consideration

Options for consideration				
	Year 1 24/25	Year 2 25/26	Year 3 26/27	10-year total
Option 1 – Programme to fit HCC LTP Baseline budget	\$69M	\$108M	\$90M	\$1,237M
Option 2 – Option 1 + universal residential smart meters	\$71M	\$115M	\$107M	\$1,309M
Option 3 – Option 1 + network renewal backlog strategy	\$89M	\$116M	\$144M	\$2,154M
Option 4 - Option 1 + universal residential smart meters + network renewal backlog strategy	\$91M	\$123M	\$162M	\$2,227M

Note the figures in this presentation reflect the latest baseline budget agreed with Council officers

Option 1 Baseline programme differs from the Year 2 Annual Plan programme

- Year 2 of the Annual Plan was an indicative overprogrammed list of activity that was being lined up for delivery in FY2024/25, based on historic priorities. When developing the LTP we have reviewed these activities alongside all the other investment need for Council and moved projects based on the latest cost estimates, risks and investment priorities as directed by Council.

Option 1 Baseline programme includes the following activity:

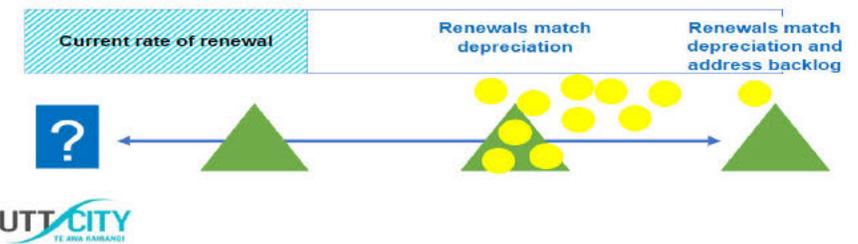
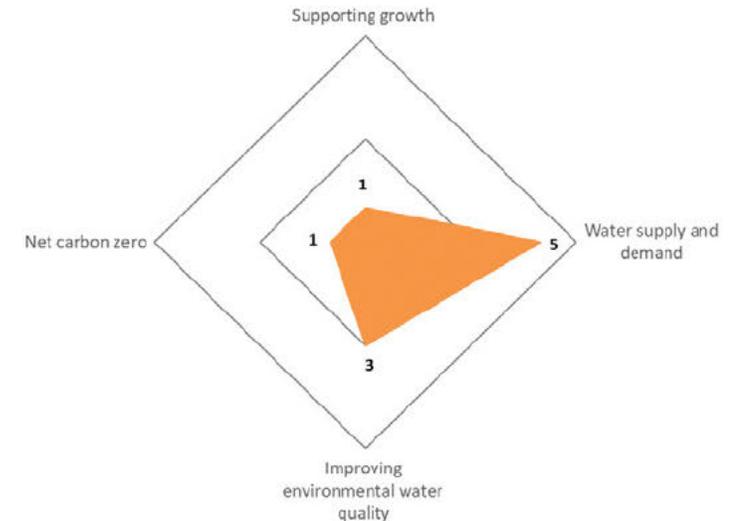
- Committed projects (inc. UHCC JV projects) – all projects underway
- Compliance / consenting projects and programmes, for example for resource consent renewals and progressing the global stormwater and network overflow consents
- Control systems and modelling – these programmes that are considered essential activity to manage assets and support other investment
- Reactive renewals for all asset types
- Planned renewals for known VHCA at a minimum and additional planned renewals where budget permits.
- Other level of service projects and growth projects

Delivering on the five strategic priorities

In the Stage 1 workshop, you told us your investment priorities were Looking After Existing Infrastructure, Sustainable Water Supply and Demand and Improving Environmental Water Quality

Option 1 - Programme to fit HCC LTP Baseline budget

- Balances investment across the five strategic priorities but focuses investment on:
 - Looking After Existing Infrastructure, and
 - Improving Environmental Water Quality
- Options 2 and 4 improves outcomes in Sustainable Water Supply and Demand with the addition of universal residential smart meters in the programme
- Options 3 and 4 improve outcomes in Looking After Existing Infrastructure, achieved through increased investment in network renewals



Option 1 – Programme to fit HCC LTP Baseline budget

Option 1 includes key council activity however it requires some major projects to be delivered later than recommended, it does not allow for sufficient investment in planned network renewals required to address the backlog within 30 years and excludes Universal Residential Water Meters

Option 1: Programme to fit HCC LTP Baseline budget

	Year 1 24/25	Year 2 25/26	Year 3 26/27	10-year total
Drinking water	\$19M	\$18M	\$14M	\$351M
Stormwater	\$7M	\$16M	\$6M	\$179M
Wastewater	\$19M	\$5M	\$11M	\$191M
Wastewater JV	\$24M	\$69M	\$59M	\$516M
TOTAL	\$69M	\$108M	\$90M	\$1,237M

Projects included in first three years

Seaview WWTP JV:

- Backup Power Supply
- RAS System Renewal
- UV Renewal

- Wastewater
 - Seaview WWTP Sludge Dryer Replacement
 - Seaview WWTP Storage
 - Main Effluent Outfall Renewal
 - Petone Collecting Sewer Wastewater Upgrade

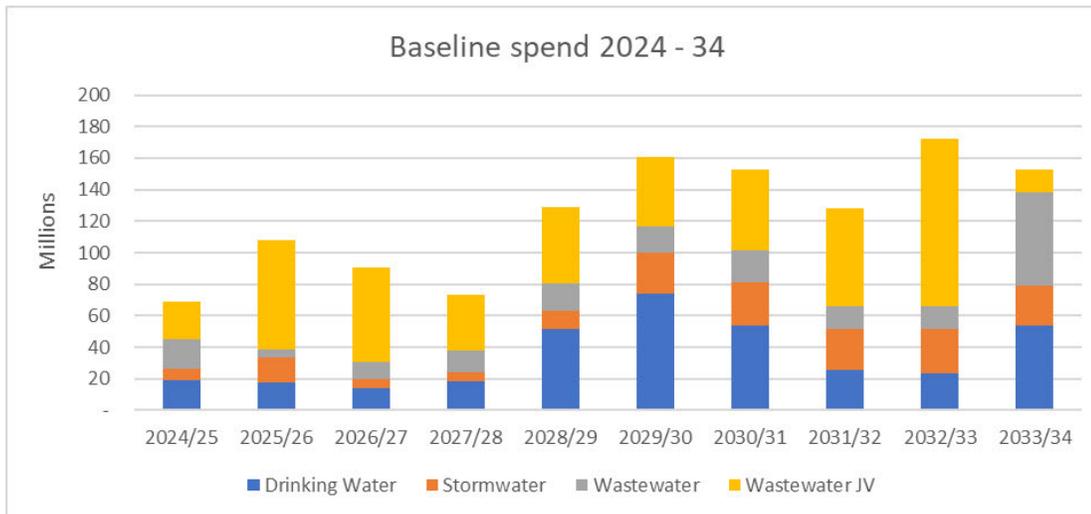
- Required level of planned and reactive renewals at the treatment plants, reservoirs, and other assets

- Required levels or reactive network and pumpstation renewals

- Planned network renewals at approximately 50% of the required level

Delivering on the strategic priorities

- Option 1 balances investment across the five strategic priorities but focuses investment on Looking After Existing Infrastructure and Improving Environmental Water Quality.



Option 1 – Programme to fit HCC LTP Baseline budget



The following major projects need to be delivered later than recommended:

Major projects excluded in first three years	Risk of excluding project
Universal residential smart meters	HCC has come close to not providing sufficient water to customers in the past. WWL's options study demonstrates that attempting to meet the region's (including HCC's) water supply requirements without universal smart metering and increased water loss management will require investment in water supply options that will cost significantly more than smart meter investment, will result in increased carbon emissions, and create worse outcomes for freshwater and the environment.
Naenae No 2 Reservoir and Outlet Main DELAYED	This has some risk as water storage does not currently comply with minimum back-up storage standards and additional growth on the valley floor over the next 5 years will exacerbate that situation. Continuing to push this project out also increases the risk of inflation price increases to the project.
Naenae No2 Reservoir Pipeline DELAYED	Gracefield reservoir requires replacement, as inspections have identified structural issues, which have been repaired, but which are not a long-term solution. The reservoir cannot be taken offline until the additional supply from the proposed Naenae no.2 reservoir becomes available.
Seaview WWTP Odour Control Renewal DELAYED	Compliance risk – HCC are receiving abatement and infringement notices for odour which increase the risk of escalating compliance action that may lead to prosecution from GWRC. There are also community impacts from frustrated residents, iwi group and nearby business owners. HCC and UHCC Councillors also requires WWL to provide monthly updates for the resolution of the plant's odour concerns.

The risks of delaying the Naenae No 2 Reservoir, Outlet Main and Pipeline, and the Seaview WWTP Odour Control Renewal projects are present under all four options.

Option 2 – Option 1 + universal residential smart meters

Option 2 carries the same outcomes and risks as Option 1 but includes universal residential water meters

Option 2 – Option 1 + universal residential water meters

	Year 1 24/25	Year 2 25/26	Year 3 26/27	10-year total
Drinking water	\$20M	\$25M	\$31M	\$424M
Stormwater	\$7M	\$16M	\$6M	\$179M
Wastewater	\$19M	\$5M	\$11M	\$191M
Wastewater JV	\$24M	\$69M	\$59M	\$516M
TOTAL	\$71M	\$115M	\$107M	\$1,309M

Projects included in first three years

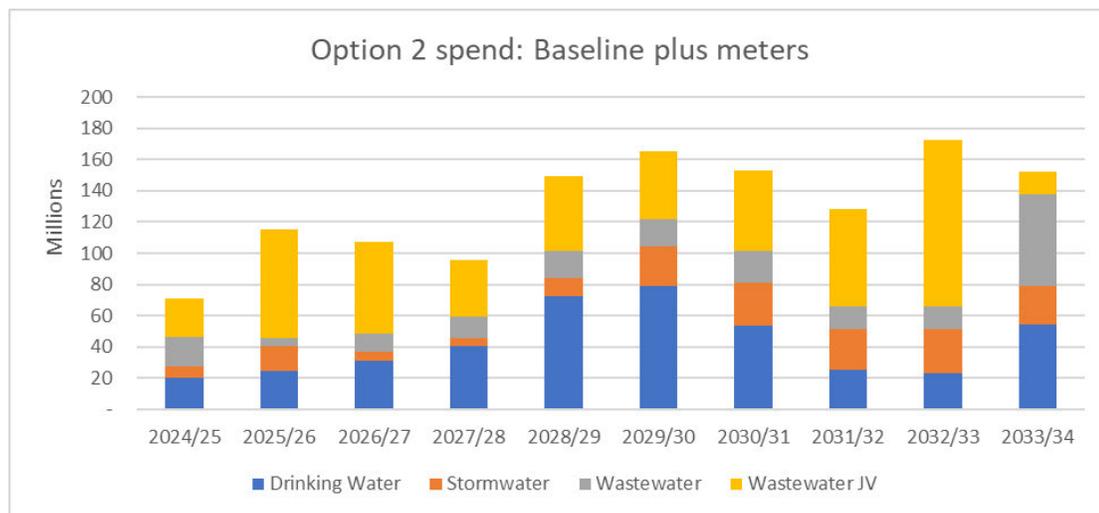
All of Option 1 baseline projects plus Universal smart water meters.

Installation of universal residential smart meters supports meeting the region's (including HCC's) water supply requirements. There are significant costs savings to be realised as HCC is better able to manage water loss, reduce carbon emissions and support achievement of Te Mana o te Wai outcomes.

Planned network renewals remains at approximately 50% of the required level under Option 2.

Delivering on the strategic priorities

- Option 2 increases investment in the Sustainable Water Supply and Demand strategic priority.



Option 3 – Option 1 + network renewal backlog strategy

Option 3 carries the same outcomes and risks as Option 1 but includes network renewal backlog strategy

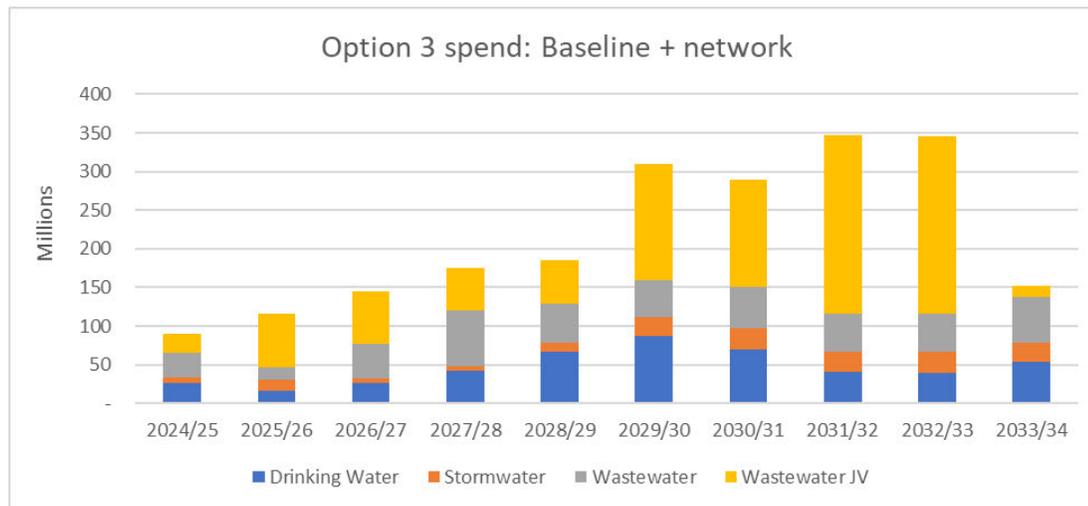
Option 3 – Option 1 + network renewal backlog strategy

	Year 1 24/25	Year 2 25/26	Year 3 26/27	10-year total
Drinking water	\$27M	\$16M	\$26M	\$468M
Stormwater	\$7M	\$15M	\$6M	\$176M
Wastewater	\$31M	\$16M	\$46M	\$474M
Wastewater JV	\$24M	\$69M	\$67M	\$1,036M
TOTAL	\$89M	\$116M	\$144M	\$2,154M

Projects included in first three years

All of Option 1 baseline projects with increased investment in network renewals.

Planned network renewals increases to approximately 68% of the required level under Option 3.



Delivering on the strategic priorities

- Option 3 increases investment in the Looking After Existing Infrastructure strategic priority.

Option 4 – Option 1 + Network renewal backlog strategy + universal residential smart meters

Option 4 builds on Option 1 deliver increased investment in network renewals and universal residential water meters

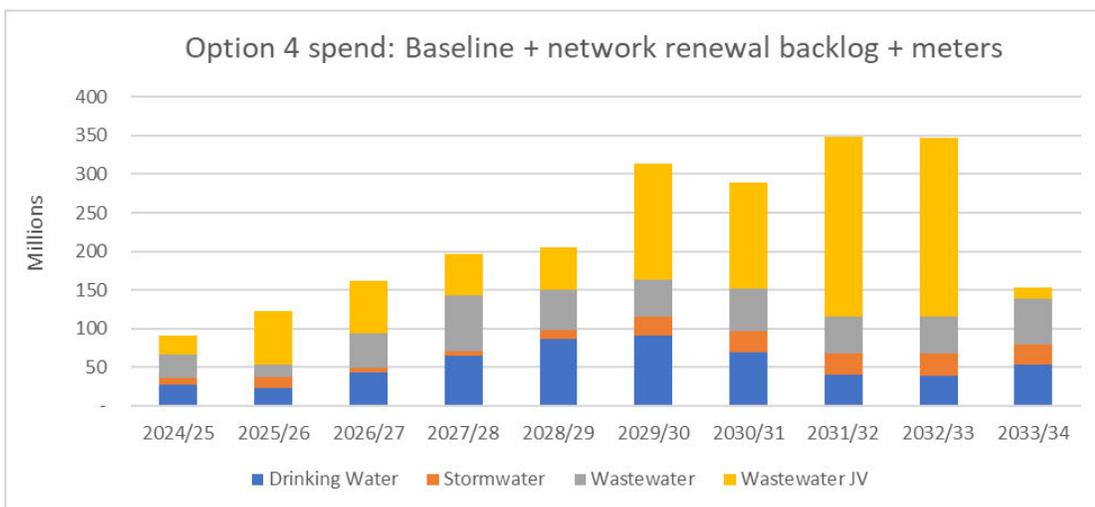
Option 4: Option 1 + Network renewal backlog strategy + universal residential smart meters

	Year 1 24/25	Year 2 25/26	Year 3 26/27	10-year total
Drinking water	\$28M	\$23M	\$43M	\$540M
Stormwater	\$7M	\$15M	\$6M	\$176M
Wastewater	\$31M	\$16M	\$46M	\$474M
Wastewater JV	\$24M	\$69M	\$67M	\$1,036M
TOTAL	\$91M	\$123M	\$162M	\$2,227M

Projects included in first three years

All of Option 1 baseline projects with increased investment in network renewals and universal residential smart meters.

As with Option 3, planned network renewals increases to approximately 68% of the required level under Option 4.



Delivering on the strategic priorities

- Option 4 increases investment in Looking After Existing Infrastructure and Sustainable Water Supply and Demand strategic priorities.

Recap - Operating Expenditure

At the Council Long Term Plan Committee meeting of 30 October, Council agreed to Wellington Water’s recommended annual OPEX budget of \$35.047M for year one only, with all subsequent years remaining at this investment level adjusted each year for inflation

	23/24 Baseline	Year 1 24/25	10-year total
Monitoring & Investigations	\$5.46M	\$6.43M	\$64.26M
Operations	\$0.20M	\$0.24M	\$2.38M
Planned Maintenance	\$3.76M	\$4.68M	\$46.83M
Reactive Maintenance	\$8.01M	\$9.51M	\$95.1M
Treatment Plant	\$8.38M	\$10.23M	\$102.31M
Management & Advisory Services	\$4.16M	\$4.05M	\$40.52M
TOTAL	\$29.97M	\$35.05M	\$350.47

An annual OPEX budget of \$35.047M is an increase of 17% on the FY2023/24 budget.

- A flatlining OPEX budget carries risk:
 - The recommended OPEX budget increased significantly over the 10-year period reflecting the operating needs of an ageing network. A flatlined budget may not be able to respond to these needs, including for reactive maintenance leak repairs.
 - Energy and disposal costs at the treatment plant can vary and are essential expenditure. Any increases here will reduce available OPEX for other operational activity.