



Wellington Water Quarterly Overview

An overview of the work Wellington Water has delivered for its council owners in the region.

Quarter 3, 2023-24: January – March 2024

About this document

Wellington Water prepares several regular reports for our council owners, regulators and other key stakeholders.

Most of these are for special purposes – financial, risk, specific projects – and go directly to the relevant council officers.

This document is intended for a wider audience. It provides an overview of our working environment, activity and performance, from a regional perspective.

It is prepared alongside and sometimes in advance of other reporting, so there can be slight differences in the data used in this versus detailed technical reports.

This report will be made publicly available and published on our website. Where possible, we aim to publish most of our information and advisory papers on our website:

wellingtonwater.co.nz

As a regional water services provider, Wellington Water is focused on restoring balance among the needs of water, people and the environment.

We do this through applying our council owners' investment in six strategic areas:



Look after existing infrastructure



Support growth



Ensure sustainable drinking water supply for the future



Improve water quality of our rivers, streams and harbours



Reduce our carbon emissions and adapt to the impacts of climate change



Increase resilience to natural hazards

These strategic investment areas underpin our ability to deliver customer outcomes: safe drinking water, water that is safe to enter the environment, protection from the impacts of flooding, and resilience to major natural events.

Regional strategy and delivery

Wellington Water's direction is towards Te Ika Rō Wai, where the needs of water, the environment and people are in balance. Te Ika Rō Wai can be understood as the fish in the water. For fish to thrive, the water they swim in needs to be pure. If we carry out our role well, and care for water at every stage as it passes back to the environment, this will restore and support manaakitanga, the ability of mana whenua to provide for people and to care for the environment.

The region faces big challenges in achieving this balance. These include the amount of water consumed by people and lost through leaks; and the quality of water that leaves networks and returns to the environment, in both planned and unplanned discharges.

Our role is to provide investment advice to councils to maintain and develop their assets. We also operate their networks and develop and deliver programmes of work to renew and replace the aging assets in the region. We create value for our shareholding councils by aligning this work with regional priorities, and through procurement and delivery models that individual councils could not achieve independently.

This year we are preparing advice for councils for their long-term plans. The process has been complicated by the Government's policy changes around water reforms.

Core delivery focus areas

We are focused on delivering our core services. Keeping to the core for us means:

1. Sufficient water supply for our communities
2. Safe drinking water
3. Removing and treating wastewater before returning it to the environment
4. Stormwater risks and impact are managed

In a time where all our council owners are facing inflationary pressures and financial constraints, we are acutely aware of every dollar we are provided by councils and ratepayers. Therefore, we prioritise our work carefully to ensure that we are applying resources and people on the right things (e.g., our core services) and to the areas needed most.

Underpinning these core areas of delivery is our ongoing programme of planned maintenance and reactive responses to network outages, and our capital delivery programme which aims to replace and renew as many of the aging assets in our region as possible before they reach the end of their operational lives.

Our ability to deliver hinges on our people. We continue to take care of our people during a time of change and sector reform. This means we are committed to ensuring our people, and the people in our supplier whanau are engaged, informed and supported.

Delivery highlights for Q3

- ✔ 16,453.7 million litres safe drinking water delivered to Wellington metropolitan region.
- ✔ 500.7 million litres safe drinking water delivered to South Wairarapa.
- ✔ 11,760 million litres of wastewater was treated at the Wellington metropolitan treatment plants.
- ✔ 132 million litres of wastewater was treated at the South Wairarapa treatment plants.
- ✔ 10,604 customer calls were received and dealt with by our Customer Experience team.
- ✔ 62 significant network outages across the region were responded to by crews.
- ✔ 0 habitable floors flooded. Habitable floors flooded is a measurement required by the Department of Internal Affairs. We can only report the incidents we know of – not every incidence is reported to us or councils.

Supporting long-term planning for 2024-34

As the region's water services provider, we provide our council owners with investment advice on their water assets in the region. We do this through the annual planning process and the long-term planning process. Through this, Councils then make decisions on what to fund.

We provide councils with investment advice based on best practice and achieving the best water outcomes for communities and the environment. Our advice is based on the strategic priorities set by the Wellington Water Committee for the region. We then work through a process with each of our councils based on their priorities and what they can afford. This includes advice on the risks and consequences of not investing. This quarter there has been a lot of activity for the 2024-2034 Long-Term Planning and this process is underway for all our councils.

Our 2024-2034 Long-Term Planning advice

We have provided councils with **three levels of capital investment advice** for the region:

- 1 **\$30 billion over 30 years** - the total capital investment **needed** to deliver the region's strategic priorities.
- 2 **\$7.6 billion over 10 years** - this is our **recommended level** of capital investment based on the maximum that can be delivered (a 30% uplift of work year on year that plateaus at \$1b per year).
- 3 **\$2.8 billion baseline programme** – based on funding assumptions from councils' 21-31 LTPs. This is the basic level of capital investment to keep the lights on but won't improve the region's water assets to a sustainable and manageable level.

Councils have been clear that the recommended level of investment is unaffordable and across the region councils are consulting on funding levels that are closer to the baseline programme. The likely levels of funding will exacerbate the region's critical risks and create new ones.

Of particular concern is the ability to supply water to communities in the coming summers and the longer-term costs of deferring this investment now. Based on councils' proposed level of funding, there will be limited work to support population growth, renew infrastructure at a sustainable rate, improve water quality and resilience and reduce carbon emissions.

Long-Term Plan advice – current status

Our councils are currently consulting on their 2024-2034 Long-Term Plans, which outlines their proposed level of funding into their water assets and the services we provide on their behalf. Councils are expected to make their final investment decisions and finalise their Long-Term Plans by the end of June 2024.

In the meantime, we are supporting councils in this process by providing them with information about the expected outcomes and levels of service based on their proposed investment. This will also include being clear on the risks and issues arising from unfunded activities. We'll make any needed updates to the draft investment plans as well as any changes arising from the Council consultation processes. This advice will be provided to councils during Quarter 4.

We continue to receive high public interest in the investment advice we have provided councils and the likely impact of the investment for customers and ratepayers. To be transparent, we have published the investment advice we provided councils for the first stages of the LTP process on our website -

<https://www.wellingtonwater.co.nz/resources/documents/document-library/>

Providing a sufficient supply of drinking water

Ours and our councils' ability to provide a sustainable supply of drinking water remains at risk. Water use across the cities in metropolitan Wellington is at an all-time high. The network is old with increasing leaks (around 44% water loss on average for the metropolitan councils), people are using a lot of water and population growth is adding to the issue.

Managing the water shortage risk for the 2023/2024 summer

For the 2023/2024 summer period, our modelling showed a significant risk of councils having to put in place tighter water restrictions for longer periods of time to avoid the risk of an acute water shortage (e.g. asking people to significantly reduce their indoor water use).

We have been clear with our councils and the public that we are unable to materially reduce this risk during summer within our current level of funding and resources and the constraints of the aging network. Instead, our focus has been on getting ready to respond if tighter restrictions were needed, ensuring the public understand the risk, help them to prepare, and asking for their help by being careful with their water use.

During this quarter, our councils had to move the region up to Level 2 Water Restrictions and we kept a close eye on demand for water during two critical points in the summer (Wellington Anniversary and Waitangi long weekends) when traditionally water use significantly increases.

Our aim was to avoid having to go up a further level in restrictions. To do this we increased our engagement and communications with local communities, the public and other relevant public agencies (WREMO, FENZ, Te Whatu Ora, and Taumata Arowai).

We worked to reach a wide range of people in the region through increased media coverage, advertising, and using our channels to get the message out there. The community stepped up to the challenge and thanks to public efforts, water use stayed steady during the critical times in the summer, and we avoided going up to Level 3 this summer.

Thanks to our councils, WREMO and all the agencies who supported our efforts and worked with us to manage what was a tricky summer.



Wellington Water Committee Chair, Mayor Barry filming a video outside the region's drinking water storage lakes, explaining how the region's drinking water system works and the importance of conserving water during summer.

Providing safe drinking water

Drinking water compliance

We have continued to provide the region with safe drinking water this quarter.

The one exception is that the water at the Waterloo Water Treatment plant remains non-compliant with the new chlorine rules that were introduced by Taumata Arowai late last year. This impacts up to 800 Lower Hutt households.

The new rule requires water to have longer contact time with chlorine than was previously required. This is to further reduce the risk of treated water becoming contaminated within the supply network as it flows from the treatment plant to households and is a precaution against the slim possibility of contaminants getting through the treatment process.

Meeting the new rules requires significant upgrades to the network. We are working with Greater Wellington Regional Council and Hutt City Council on this and some of the upgrades have already been completed with more due to start in July 2024. We estimate that it could take up to two years before we can achieve full compliance.

In the meantime, the water being supplied from the Waterloo Water Treatment Plant complies with the previous standard, so it is still safe to drink.

As previously reported, all water treatment plants in South Wairarapa remain non-compliant and significant investment is needed to bring these plants into compliance.



The Waterloo Water Treatment Plant, which supplies around 40% of the Wellington metropolitan region's water supply.

Providing fluoridated drinking water

Fluoridating the drinking water

Due to a number of unexpected operational events, equipment issues, and health and safety improvements, in February 2024, we publicly announced a drop in fluoride levels in the drinking water across the Wellington metropolitan region. This means we have not been able to consistently meet the Ministry of Health (MoH) fluoride target levels of 0.7 – 1.0ppm, 95% of the time.

This is reflected in this quarter's compliance results for fluoride. It's important to note that all four metropolitan Water Treatment Plants have been fluoridating the drinking water at the right levels however we have not met the MoH's target of fluoridating 95% of the time. This is measured on a monthly basis and while we have met this requirement some months in the quarter we have not achieved this consistently for the whole three month period. In some months we have been just under the 95% threshold.

Equipment issues at Gear Island has meant we are replacing the current pumps at the fluoride facility with new more suitable pumps. We expect to have these installed in quarter 4.













We continue with our programme of ongoing planned maintenance to ensure that the equipment at the fluoride facilities are running as they should. This means that we will have to turn off the fluoride facilities from time to time. If a facility is off for more than a few days in a month, this quickly impacts our ability to meet the MoH target for fluoride.




A long-term solution to upgrade the entire fluoridation system at all the metropolitan Water Treatment Plants would be needed to reliably meet the MoH target levels for fluoride.

We are currently doing some planning on what the best long-term solution would look like. This will include considering back-up capacity and options at the plants so we can continue to fluoridate drinking water if a facility fails or needs to be turned off for maintenance work, which we commonly have to do.

Throughout the quarter we continued to notify the public via our website and our social media channels every time there was a fluoride outage. We also continued to provide our Board, councils, and the Wellington Water Committee with monthly updates on our fluoride performance and any non-compliances. [We also publish this information on our website.](#)

Fluoride compliance at the Wellington metropolitan water treatment plants – Q3

Water Treatment Plant	Jan	Feb	Mar
Waterloo			
Wainuiomata			
Te Mārua			
Gear Island			

 Compliant
 Compliant but with noted issues
 Not compliant

For the months that we are not compliant, we have fluoridated the drinking water at the right levels but did not meet MoH's target of fluoridating 95% of the time.

Removing and treating wastewater

The Moa Point, Western, and Seaview Wastewater Treatment Plants were non-compliant this quarter. This is due to capacity, mechanical, and environmental factors.

Moa Point Wastewater Treatment Plant

At Moa Point we are seeing higher daily average concentration of solids in the wastewater. We are working on changes to the treatment process and urgent refurbishments to address this. However, ongoing mechanical issues with the plant's sludge handling system and UV system is preventing us from bringing the plant back into compliance.

Western Wastewater Treatment Plant

For the Western Wastewater Treatment Plant there has been high levels of solids coming into the plant. We've made some changes to the treatment process, and while we are seeing some improvements, this isn't enough to meet compliance. We continue to investigate this issue and make further adjustments.

Seaview Wastewater Treatment Plant

The Seaview Plant was non-compliant this quarter due to a higher level of bacteria in the wastewater. This is due to issues with the biological treatment process and mechanical issues in the UV systems. We're working on improvements to these areas to return the plant back to compliance as soon as possible. The plant continued to receive complaints about odour throughout the quarter but the number of complaints did reduce towards the end of Q3 as we completed work on replacing the biofilter media which is responsible for breaking down the odour-causing compounds in the air at the plant.

























Porirua Wastewater Treatment Plant


The Porirua Plant was fully compliant at the beginning of this quarter. A short spike in the level of bacteria in the wastewater in February and two discharges from the plant, which caused some discoloration at Rukutane Point, meant that by the end of Q3 the plant was largely compliant but with noted issues. All incidents are being investigated.


South Wairarapa Wastewater Treatment Plants


All South Wairarapa wastewater treatment plants continue to deal with ongoing performance issues. They all require significant investment to return to full compliance or to avoid further instances of non-compliance.

Compliance status for the region's wastewater treatment plants – Q3

Wastewater Plant	Jan	Feb	Mar
Moa Pt			
Porirua			
Seaview			
Western			
Featherston			
Greytown			
Lake Ferry			
Martinborough			

 Compliant

 Compliant but with noted issues

 Not compliant

Increasing transparency around network overflows

As part of our commitment to transparency, we have started publishing information about [wastewater overflows from the network on our website](#). This will be updated monthly and reflects network overflows recorded at selected, monitored sites across the metropolitan region. It is not representative of all network overflows, but we are working on providing the public with a more accurate picture of this.

Delivery of the region's capital works programme

We continued to make good progress in our Capital Works Programme this quarter.

In Q3 our total spend on the capital delivery programme was \$225M at a regional programme level. This is an increase of 31% on the same period last financial year. We are currently forecasting to deliver \$336m of capital investment at year end.

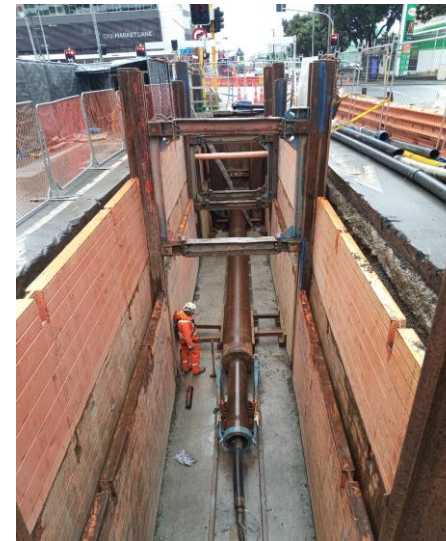
We have made a commitment to the Water Committee to track and report on the kilometres of pipe we have laid on a quarterly basis. For Q3 we have laid 5.1 kilometres of pipe across the region against a quarterly target of 5 kilometers, bring the year-to-date total to 17.3 kilometres of pipe laid.

KMs of pipe for this financial year

Councils	Water	Wastewater	Stormwater	Q1 Total	Q2 Total	Q3 Total	YTD Total	YTD Mains Total	YTD Laterals Total	Year End Forecast
HCC	4.9	4.6	0.1	2.8	3.4	3.4	9.6	8.2	1.4	12.3
WCC	2.1	0.9	0.3	1.6	1.0	0.7	3.3	2.7	0.6	3.5
UHCC	0	1.1	0	0.9	0.2	0	1.1	0.5	0.6	1.5
PCC	2.6	0	0	1.0	0.7	0.9	2.6	2.4	0.2	3.4
GWRC	0.5	0	0	0.2	0.2	0.1	0.5	0.5	0	0.7
SWDC	0	0.2	0	0.1	0.1	0	0.2	0.2	0	0.2
Total	10.1	6.7	0.4	6.7	5.5	5.1	17.3	14.5	2.8	21.6

Figures are in Kilometres

Delivery across the Capital Works Programme for the quarter has included the official opening of the Omāroro Reservoir in February with the site and the land above the underground reservoir being reopened for public use. We also made great progress on installing a new wastewater pipe and pump station in Taranaki St with work now ahead of schedule, and a new wastewater storage tank being constructed in Porirua is starting to take shape.



New section of pipe being installed as part of the Taranaki Street Rising Main Project in central Wellington.



Sections of the new wastewater storage tank in Porirua being built. Once completed the tank will hold wastewater during times of heavy rain to reduce overflows into the environment.



Mayor Whanau & Wellington Water CE Tonia Haskell at the official opening of the Omāroro Reservoir in February.


Operational network maintenance

Finding and fixing leaks

We continue with our programme of work to find and fix the most significant leaks (those losing the most water and that have the most impact to public supply and/or safety) across the region. Recently WCC, HCC, PCC and UHCC have provided us with additional funding to fix more leaks in their cities. This is starting to have a positive impact on the backlog of leaks around the metropolitan region.

Leaks by the numbers - across the region

As at 1 May 2024:

 **7,284** leaks fixed this financial year (from 1 July 2023) (8042 total last year)

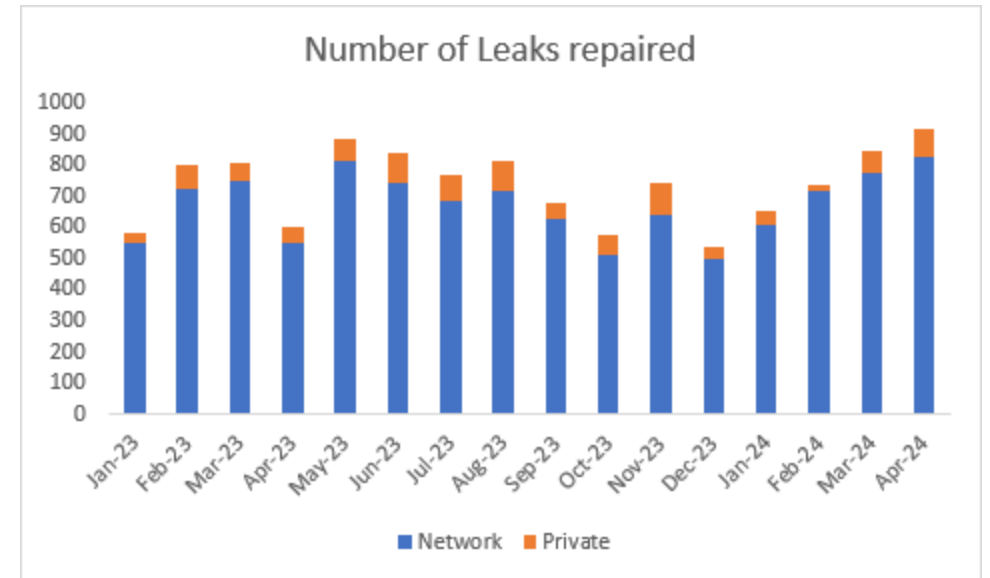
 **2,415** confirmed open leak jobs

 **1,399km** of the network proactively surveyed for leaks since 1 July 2023

We continue to update the public and our councils on our programme to find and fix leaks on a weekly basis. You can find this information on our [website](#).

Public and private leaks repaired across the region

Overall, regionally we have seen an increase in the number of leaks (public network and private) that have been found and fixed this quarter, which correlates with the increased investment by councils in repairing more leaks.



Ready to respond when needed

A core service we provide to our councils is the ability to respond to unexpected outages as they occur on the network. When dealing with an aging network where many assets are near or past the end of their operational lives, we are continuing to see a high frequency of service interruptions, whether it's through leaks, bursts or other unplanned events. The value of our model is that we have crews ready to respond to these events when they occur, including the resources to communicate and engage with those in the community that are impacted by these events.

This quarter we mobilised our crews to respond to a total of **62 significant network outages** across the region, on behalf of our councils.

Plimmerton Reservoir

A significant outage of note this quarter was when a drinking water pipe which feeds water to the Plimmerton Reservoir burst in February. At the time of the burst the reservoir levels were at 85% full, with around 23-24 hours worth of water remaining. The crews had initially estimated an 8-hour repair time but due to our swift response crews were able to fix the pipe within 4 hours without having to turn the water off or any impact to residents and customers. While this incident did not attract a lot of attention, had the team on the ground not responded as well as they did, the impacts to the public could have been significant. As our Customer Information and Resolution Lead, Ropeti Taito describes it "we were like water ninjas sweeping in and repairing the burst with no one even noticing the burst had occurred!"



Site of the burst drinking water pipe which feeds into the Plimmerton Reservoir

Our response



Around 5 teams responded to the incident covering coordination of resources through to the crews on the ground



0 customer enquiries or complaints due to our swift response



4 hours to repair the burst with no impact to the public

Te Mana o te Wai

Working with iwi to protect the wai

We continue our work to bring effect to Te Mana o te Wai and restoring the balance between the wai, environment, and people. We're looking at how we apply Te Mana o te Wai in our day-to-day operations and decisions. This needs to happen not just for planned work but also for reactive emergency work where we continue to hold the value of protecting the wai at the forefront.

A good example of this was seen on 10 March 2024 when a wastewater pipe burst in Porirua was reported. The burst was causing untreated wastewater to enter Kenepuru Stream in Bothamley Park. Our crews responded quickly to find a way to stop the overflow of wastewater into the stream and minimise the impact on Kenepuru Stream and any further residual impact downstream.

Core to our response was working closely and early with local iwi Ngāti Toa. Working alongside the incident response and management team, Ngāti Toa immediately placed a rahui on Kenepuru and Porirua streams as well as the outlet into the harbour. The pipe was located in a gully, which made access for our crews and repairs difficult with risks associated with the unstable nature of the site. Despite this complexity, our crews worked at pace to install multiple pumps to divert the wastewater and stop it entering the environment while we worked to repair the burst pipe.

Signs were posted, nearby customers notified, and environmental sampling was undertaken. We also conducted a Geotech assessment of the site to consider the risk to our crews before going on site to make the repair. Pumps were installed and the pipe was repaired within 48 hours of the burst being reported.

It affects our iwi mana whenua partners deeply when wastewater enters the environment. We received some good feedback from Ngāti Toa Rangatira, which highlighted the great work by our teams to honour our commitment to Te Mana o te Wai in response to this incident.

“ I want to commend the Wellington Water team for their response. The urgency and focus of the response was second to none. The pace of setting up the interim measure (the pump) and the plan to remediate over the next 2 weeks is faultless. The communication from the Wellington Water team has been clear, deliberate, and focused. In a very bad situation, the team have been exemplary. ”

*Rawiri Faulkner, Pou Toa Matarau
Culture, Environment, Settlements, Te Rūnanga o Toa Rangatira*



One of the pumps that was installed to stop wastewater from entering the environment



The site of the burst wastewater pipe, which was in a gully and hard to access

Looking after our people

Staff engagement

Our engagement scores continue to remain relatively steady. Our employee engagement score for Q3 is 58% which is down 3% from Q2 but up 1% compared to the same time last year. We consider the uncertainty with water reform has attributed to the drop this quarter.

We are continuing to work on our leadership and communication with our people to ensure they are engaged and their wellbeing is maintained.

Recruitment

The organisation has grown over the last 12 months, with an additional 35 Wellington Water staff in Q3.

We are continuing to recruit for experienced and qualified people for crucial roles on the frontline, which remains a highly competitive market.

Staff turnover continues to be relatively low at around 13%.

Gender pay equity

We have been working hard to close the gender pay gap between men and women and have made positive gains. Our current pay equity calculation across the organisation shows women are paid 1.5% more than men based on total remuneration.

In contrast, the Public Service Commission calculate that the pay gap between men and women in the public sector to be at 7.7%.

Health and Safety

Unfortunately, this quarter we had three significant health and safety incidents. All incidents were investigated and reviewed, with lessons learned shared widely across Wellington Water and our wider whānau.

This quarter we launched an updated Drug and Alcohol Policy and related processes. Training for managers was rolled out to build further internal understanding and awareness of why we undertake drug testing and the role they play in helping to keep our people safe.

Mental health and wellbeing

We continue to look at ways to increase our wellbeing efforts. This quarter we rolled out a step challenge which saw 38% of the organisation take part with over 34.6 million steps taken.



Celebrating our people

Wellington Water is made up of hard-working people who are dedicated to delivering good water outcomes for our councils and communities. We think it's important to celebrate our people so every week we profile a member of our team and shine a light on the important mahi they do and why they do it. We call these 'Mahi Monday' and every Monday we publish a profile on our social media channels to share our people's stories with the public. Follow us on Facebook and X to find out more.



Monday Mahi posts celebrating our people, featuring from left to right: Sheena O'Brien – Operations Engineer, Nyall O'Connor – Technical Advisor Drainage Investigation, Nick Hewer-Hewitt – Head of Network Performance and Navya Koralla - Data Quality Administrator.