Kaitiaki Waj

Wellington Water's official magazine | Autumn 2019

Are you a water hero?

How we're helping our customers be more resilient

Our water, our future

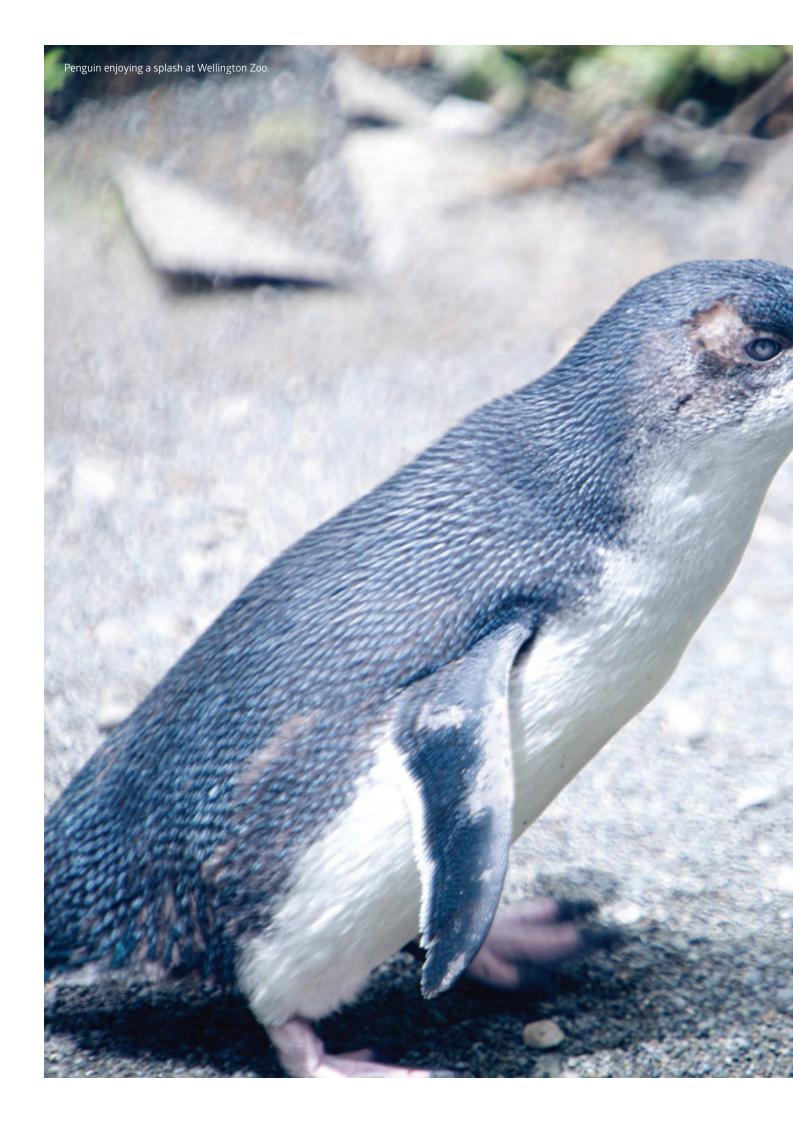
The big projects we're working on around the region

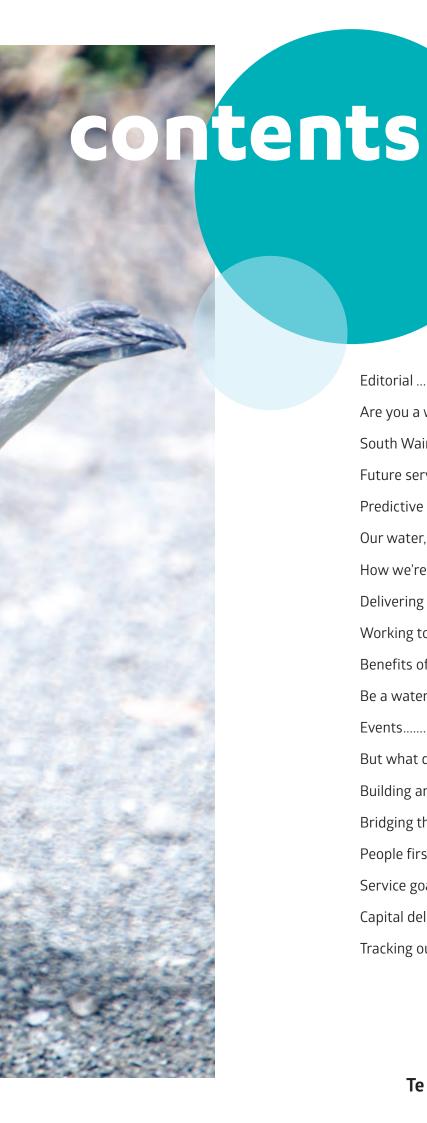
Working towards a common goal

Co-designing health and safety



Our water, our future.





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a summer of hot water

One of the best things about working in the water sector is that everywhere you go, you encounter passion.

mongst our team, that passion can look like people putting in long weekend days to help fix a drinking water problem for a council that isn't one of our clients, even as a restructure is creating uncertainty about their family's future. Amongst customers, it can look like a white-hot email to a mayor because something hasn't happened as they think it should.

While most of us spend most of our days taking water for granted, as soon as something goes wrong, we can get pretty excited.

A good example of that was our performance in attending to leaks over summer. Most months we'll see around 800-1,000 leak reports a month. Over summer, these reports increase by as much as 40 per cent. It's not easy to gear up quickly to meet this sudden spike. But it can be really frustrating for customers to see a leak going unattended for days – sometimes weeks – especially when they hear a message on the radio asking them to save water.

We're sorry whenever we don't meet people's expectation of our service, and repairing leaks promptly is no exception. We didn't do that over this summer, and as we work hard to make sure we're focusing on what matters to people, we have to remember it's the little things that count.

Although it can be uncomfortable when we get it wrong, we love seeing that energy amongst our communities. It's a challenge, though, to rouse the same level of interest on issues that maybe aren't yet quite so visible, but in the long term are way more important than a dribbling toby.

For example: How should we make sure we have enough safe drinking water? The way things are going, with a growing region and water use trends, we could need a new supply source in 20 or 30 years. That's not that far away – especially when you think about how long it takes to get big projects approved and funded. And what about the quality of the water in our cities' streams, rivers and

He wai, he wai
He wai herenga tāngata
He wai herenga whenua
He waiora
He wairua
Tis water, tis water
Water that joins us
Water that necessitates the land
Soul of life
Life forever

harbours? Or the impact of rising sea levels on low-lying suburbs? Or the fact that pipes in the ground simply can't cope with intense rain events? These are just a few of the big issues we're facing.

They're community issues, and communities need to decide how they are prioritised and addressed (read: paid for). What would be great to see is people getting just as excited about these big hairy challenges now as they do over how long it takes to fix a leak.







See how your choices can protect our waterways at

wheredoesitgo.nz

are you a water hero?

How we're helping our customers be more resilient.

ellingtonians are reminded on a pretty regular basis that we live in a seismically active region.

Our drinking water supply and wastewater networks are vulnerable with pipelines crossing known earthquake fault-lines multiple times. If damaged in a large earthquake, these pipelines could take months to repair - leaving some suburbs without drinking water for up to 100 days, and without wastewater services for more than 120 days.

Water Heroes are people who are prepared. You may not have any control when it comes to a major earthquake and its effects on the region, but you do have control about how you will respond and how prepared you, and your family, are.

We recommend people store twenty litres of water, per person, per day for at least seven days to make sure their household is self-sufficient and that they have a plan for the safe disposal of wastewater (in particular their poos and wees).

We're asking people 'Have you got what it takes?' This builds on our 2017/18 campaign 'Step up and be a water hero', which encouraged people to get their water storage sorted at home.

'Have you got what it takes?' nudges people to think about







Water Hero messaging will be promoted online, on vehicles and on radio around the region. We're asking people to store water today, and have a plan for the safe disposal of their wastewater (poos and wees).

how prepared they are, and to put some thought into the steps they need to take to make sure they have their water storage sorted and a plan for their wastewater.

A main part of the campaign was an interactive quiz that takes people on a journey to see how prepared they are, and if they're not prepared, provides solutions of what they need to do to become a Water Hero.

To learn more about how to be prepared, and to take the Water Hero quiz, visit wellingtonwater.co.nz/your-water/emergency-water



2018-21

Statement of Intent update

Our customers will be resilient in the event of a natural disaster because we'll improve the number of households that have drinking water stored and have a plan for the safe disposal of their wastewater (SOI measure 9).

UPDATE: Our Customer Perceptions
Survey (Colmar Brunton, February 2019)
tells us that more than seven in ten
residents have fewer than 20 litres of
water stored per person for emergencies.
Four in ten Wellington residents have a
plan in the event that they are unable
to use their toilet. This leaves six in ten
without a plan or unsure of their plan.
Upper Hutt residents and homeowners
are more likely to have a plan than
average, while renters and those aged
under 40 are less likely.

Our online quiz (left) takes people on a journey asking them how prepared they are, and give them tips and solutions for what they need to do to become a Water Hero.

South Wairarapa propose to join Wellington Water

South Wairarapa District Council (SWDC) are currently in the process of consulting with their ratepayers about the possibility of joining Wellington Water. Following a four week consultation period a hearing will be held on 27 March (if required).

f the proposal is approved, SWDC will join our five other client councils (Wellington City Council, Porirua City Council, Hutt City Council, Upper Hutt City Council, and Greater Wellington Regional Council) as a shareholder.

SWDC is making this proposal as a solution to address increasing regulatory and financial constraints.

Under the proposed arrangements, SWDC would retain ownership of its three waters infrastructure and water race infrastructure. Some operational assets would transfer to Wellington Water, but not infrastructure assets. SWDC would retain a direct relationship with the Wellington Water Committee.

Further details, including the Statement of Proposal, are available on the SWDC website **www.swdc.govt. nz/wellington-water-proposal-have-your-say**.



Taking a regional approach to looking after our services.

By Fraser Clark, Principal Advisor – Strategy, Network Strategy and Planning.

Our infrastructure and assets are designed for the long haul, often operating for more than 30 years, and conceivably for 100 years or more. Our investment and operational decision-making needs to reflect these long timeframes, while also making sure we meet evolving service expectations (without under-or over-investing). Under-investment increases risk, while over-investment, or putting the wrong assets in the wrong places, results in higher costs.

Our Three Waters Strategy helps us to plan for the long-term, by looking at each of the services – drinking water, wastewater and stormwater – and considering how we expect them to evolve, and the challenges we expect them to face, over the next 30-50+ years. The Strategy sets out how we expect to achieve our customer outcomes: safe and healthy water; respect for the environment; and resilient networks that support our economy.

In developing our Three Waters Strategy we've identified a number of issues that could significantly impact on our service delivery. These issues are:

- · The sustainability of our drinking water supply.
- · Management of sludge from wastewater treatment.
- Receiving environment water quality.
- · Flooding and flood management.
- Ensuring our services are resilient to major events.
- Planning for growth.
- Minimising our carbon emissions.

These issues all impact on the delivery of water services across the region as a whole and will require a regional

response. For example, all of the region's water is currently supplied from just three water sources, with no single source able to meet all requirements. The associated water supply infrastructure is designed to operate regionally and does not supply each city on a stand-alone basis. The study into a sustainable drinking water supply also needs to recognise the region's needs while reflecting on related issues such as resilience and environmental impact.

For each of these issues we will complete a Future Services Study. These studies will set out the strategic case for action (i.e. how these issues will impact on our services and service goals) why we need to act, and then develop a programme and timeline of activities in response. These responses could be: infrastructure investments, encouraging and enabling investments and actions by consumers; or changes to city and regional plans and policies.

The proposed programmes of work will be prioritised using our 'smart investment' process alongside maintenance and renewal activities for existing assets and then fed into our client council's Long-Term Plans (LTPs).

The issues are complex, and there will be interactions and interfaces between them. For example, increasing water demand (i.e. the subject of the sustainable water supply and growth studies) increases waste water and sludge volumes (sludge management), the energy required to deliver the services (carbon) and the risk of discharges to the environment (receiving environment water quality). The programmes of work will need to recognise these interactions and the associated trade-offs.



Installation of the UV treatment plant at Gear Island. Our water supply infrastructure is designed to operate regionally and doesn't supply each city on a stand-alone basis.

To develop the programme of work we will use the Treasury's Better Business Cases methodology. This approach is recognised as 'best practice' for government infrastructure investment – it makes sure the core issues are fully understood, that a clear 'case for change' or strategic need has been defined, and that the expected benefits have been identified and can be measured and monitored to ensure that the investment is successful. The approach also ensures good buy-in from all of the stakeholders, which will be essential for these region-wide issues.

Not all of these issues will require the use of the Better Business Cases approach. For example, carbon emissions reduction and growth relate more to our strategy and approach across all of our activities, rather than requiring specific interventions.

The first step in the Better Business Cases process is to develop the strategic case, that clearly establishes the strategic issue and its root cause, and the benefits expected to be achieved by resolving them. The first of our strategic cases have now been developed, with others also under way. The first of the studies commenced in mid-2018 and they are expected to continue through into 2020. We are seeking to make as much progress as possible, subject to funding, to be able to inform the pending updates to our councils' LTPs. These LTPs will be setting out investment needs for 2021-2024 and beyond, and will be developed over the next 12-18 months.

These are challenging and exciting times for Wellington

Water and the water sector as we seek to ensure our customers' expectations of safe and healthy water, respect for the environment, and resilient networks that support our economy are met into the future. The issues we are facing are similar to those faced by other water services businesses in New Zealand and around the world, increasing the options available to us for addressing them. We look forward to working with our customers, our client councils, and the experts in our consulting and contracting panels to identify and implement solutions that meet our customer outcomes and service goals, while continuing to deliver value for money.

2018-21

Statement of Intent update

We'll understand future services needs by completing the following three studies: carbon reduction; smart services; and resilient networks, and progressing the following strategic cases and business cases: sustainable water supply; receiving water quality; stormwater – flooding; sludge management; and supporting growth (subject to funding) (SOI measure 15).

UPDATE: The resilient networks study has been replaced with a gap analysis and the development of an action plan. We've progressed the following three strategic cases:

- · Receiving water quality: strategic case work started.
- · Sludge management: strategic case being drafted.
- Sustainable water supply: strategic case completed. Next steps are being planned.



The storage water in our Stuart Macaskill Lakes is used to supplement supply when we can't take enough water from the rivers or aquifer to meet demand.

About the studies

Sustainable drinking water supply

About the issue		Current water consumption and a growing population will lead to water shortages, or require the development of a new water source by 2040.					
	There are also threats	to our existing water s	ources, such as potentia	al contamination, that o	ould restrict their use.		
Expected benefits	Water of appropriate	quality is available to m	neet social, cultural and	economic wellbeing.			
	Improved efficiency of	supply across the netv	vork (including reduced	leakage).			
	Improved environmen	tal outcomes at our wa	ter sources.				
Current status	Strategic case comple	Strategic case completed.					
Next steps	Determine success measures and investment objectives.						
	Long-listing of potential options for assessment against these measures and objectives.						
Possible outcomes	Measures to reduce pe avoid or defer investm	Measures to reduce per-person and total demand, and improve end-use and operational efficiency (i.e. leakage) to avoid or defer investment in new sources.					
Service goals affected	We provide safe and healthy drinking water.	We influence people's behaviour so they are respectful of the environment.	We plan to meet future growth and manage demand.	We manage the use of resources in a sustainable way.	We ensure the impact of water services is for the good of the natural and built environment.		

Management of sludge from wastewater treatment

About the issue		The current method of sludge disposal for Wellington and Porirua where un-stabilised sludge is buried in landfills s unsustainable and is constraining other waste minimisation initiatives.					
	The sludge is and its processing is a source of greenhouse	he sludge is and its processing is a source of greenhouse gas emissions.					
	Community and cultural values constrain sludge disposal	options and potential uses.					
	Inconsistent practices impede a long-term integrated resp	consistent practices impede a long-term integrated response.					
Expected benefits	Sludge disposal does not constrain landfill operations and	ludge disposal does not constrain landfill operations and waste minimisation activities.					
	Carbon emissions are minimised.						
	Capturing of inherent value of sludge (i.e. energy and/or nutrients).						
Current status	Strategic case being finalised.						
Next steps	Determine success measures and investment objectives.						
	Long-listing of potential options for assessment against tl	nese measures and objectives.					
Possible outcomes	Additional processing of sludge to enable beneficial use a volume and carbon emissions.	s energy and/or nutrients and minimise total waste					
Service goals affected							
	We plan to meet future growth and manage demand.	We manage the use of resources in a sustainable way.					

Receiving environment water quality

About the issue		Stormwater is typically discharged into waterways without treatment but may contain contaminants that are narmful to health or the receiving environment.					
	Wastewater is occasionally discharged into the environment without treatment, or as a result of leaks in the network or public pipes.						
	The quality of our wat regulation.	The quality of our waterways is of increasing interest to our customers and is subject to increasing levels of regulation.					
Expected benefits	Waterways that meet	the public's expectatio	ns for health and overa	ll quality.			
Current status	Strategic case comme	Strategic case commenced.					
Next steps	Strategic case expecte	Strategic case expected to be completed by mid-2019.					
Possible outcomes	Design approaches the	Design approaches that prevent or minimise the discharge of untreated, contaminated water.					
	Changes to regional a	Changes to regional and district plans and policies that help to control sources of contamination.					
	Improved monitoring	and analysis.					
Service goals affected	We minimise public health risks associated with wastewater and stormwater.	We will enhance the health of our waterways and the ocean.	We influence people's behaviour so they are respectful of the environment.	We ensure the impact of water services is for the good of the natural and built environment.	We provide reliable services to customers.		

Flooding and flood management

About the issue	Climate change is expected to increase the risk of flooding through increasing the frequency of major events and sea level rise.						
		The intensification of land use and the associated increase in the use of non-permeable surfaces could increase stormwater volumes and increase the risk of flooding.					
Expected benefits	Minimised flooding im	ipacts.					
Current status	Strategic case to com	Strategic case to commence in 2019/20, subject to funding.					
Possible outcomes		Design of new developments to provide for water neutrality (i.e. no net increase in stormwater volumes). Increased use of green infrastructure and water sensitive urban design such as wetlands.					
Service goals affected	We minimise public health risks associated with wastewater and stormwater.	We will enhance the health of our waterways and the ocean.	We ensure the impact of water services is for the good of the natural and built environment.	We minimise the impact of flooding on people's lives and proactively plan for the impacts of climate change	We provide reliable services to customers.		

Service resilience

Our water infrastructure is susceptible to failure in the event of a major natural event, such as an earthquake. Re-establishing services as quickly as possible after an event is essential for community wellbeing.
Water services are restored to customers as quickly as possible.
This is likely to be a staged process, with restricted services made available until a return to full service is possible.
Our drinking water supply resilience strategy, 'Towards 80-30-80' is complete and is now being implemented.
Our Community Infrastructure Resilience programme, which provides for a return to restricted services by day 8 after an event, is nearing completion.
Longer-term investment in resilient infrastructure is now underway but will require around 30 years to complete at current levels of investment.
A strategic case for wastewater resilience has been completed but has yet to be finalised.
Risks to, and the vulnerability of the wastewater network have been assessed.
Finalise wastewater resilience strategic case and strategy.
Develop operational response plan for wastewater.
Identify gaps in overall resilience response and required resolutions.
Further public education on preparations for and activities after a major event.
Work with critical customers to ensure they have response plans in place.
Ongoing investment in more resilient infrastructure.
We provide three water networks that are resilient to shocks and stresses.

Planning for growth

About the issue	Our population forecasts suggest that the region's population could increase by more than 80,000 people over the next 30 years and all of our client councils anticipate and are planning for growth. This growth will place increased demand on networks that, in many instances, are already operating at capacity.
Expected benefits	Water services accommodate expected growth while ensuring required service levels are achieved.
Current status	Our analysis to support our client councils in meeting their requirements under the National Policy Statement for Urban Development Capacity shows that the existing networks are unable to accommodate projected growth. Integrated catchment planning has commenced for some catchments with others planned.
Next steps	Progress integrated catchment management plans, including assessing interactions between the three waters.
Main service goals affected	We plan to meet future growth and manage demand.

Carbon emissions reduction

About the issue	arbon emissions from our activities contribute to climate change. Our water sources and the waterways we perate in will be impacted by climate change, so it is in our interest to try and mitigate these effects.					
	The proposed Zero Carbon Act is expected to also impo	ose national limits for carbon emissions.				
Expected benefits	The impacts of climate change are mitigated.					
	Reduced exposure to potential cost increases as the pri	ice of carbon becomes more embedded in the economy.				
Current status	We are in the process of commissioning a report on our quantities).	/e are in the process of commissioning a report on our carbon emissions inventory (i.e. emissions sources and uantities).				
Next steps	Once complete, the inventory will inform the developm action plan.	Once complete, the inventory will inform the development of emission reduction targets and an associated action plan.				
Possible outcomes	Investment in energy efficiency projects. Incorporation of a low carbon design philosophy into or	ur standards and policies.				
Main service goals affected						
	We manage the use of resources in a sustainable way.	We provide three water networks that are resilient to shocks and stresses.				

predictive forecasting with Nowcast

How we're using technology to improve our operational response to wet weather events.

- By Dave Blackwell, Chief Advisor Smart Services, Network and Customer Operations.

f you lived in a flood-prone area and knew heavy rain was on its way in the next hour, what would you do? We want our customers to have the information they need to be able to protect their property and loved ones, and we want to make sure our networks can cope with flooding events.

To do this we've developed Nowcast, a predictive technology that can help us to provide warnings to flood-prone areas around the region, improve our operational response to wet weather events, and provide more detailed information to our modelling and investigation teams.

Currently, global weather forecast models are great for providing one-to-two-day early warnings, but lack the ability and functionality to enable an operational response at a catchment level. Nowcast helps fill this gap by using rain radars, and our network of rain gauges, to provide catchment-specific heavy rainfall information.

Developed and supported by Dr Luke Sutherland-Stacey from Weather Radar New Zealand, Nowcast is an expansion of Mott McDonald's (an engineering and consultancy company) Moata platform, which we use for some of our flow monitoring to include operational rainfall forecasting.

Nowcast uses the MetService rain radar feed (received every seven and a half minutes) and near real time rainfall data from our network of rain gauges. This data is analysed and presented to users on a map view of the Wellington region;

enhancing our real time (up to twohour forecast) understanding of what's going on outside.

Alarm notifications are generated for key people within Wellington Water based on thresholds, which have been fine-tuned over time to match the needs of various catchments. A warning text message or email is sent that includes important information about the catchment, rainfall, and upcoming rain predictions. This helps our operations team to determine any actions that should be taken (like monitoring or clearing blockage-prone culverts). Depending on the intensity and location of the rain, staff and equipment can be deployed to known troublesome areas.



Our initial trials, based on historical flood events, demonstrated Nowcast's ability to provide accurate forecast data for most heavy rainfall events. The tool also provides us with a rapid analysis of what intensities and volumes of rainfall actually happened in a storm, which will help us to understand in much more detail the performance of our networks, and make informed recommendations on how to fix problem areas.

There have been a few key learnings through the project and operations stages which include; using rain gauge data from wider catchments than those being monitored. Greater Wellington Regional Council rain gauges allowed upcoming fronts to be analysed from outside the Wellington metropolitan area. Also, looking at a screen 24x7 doesn't really work, so thresholds and event notifications, in conjunction with, checking long-and medium-term forecasts allow our customer and operations team to incorporate Nowcast into their daily activities.

No large-scale wet weather events have occurred since its introduction, but the detailed resolution of rain gauge data has allowed us to analyse and investigate local street flooding in Porirua and suggest improvements.

Where to next?

There are a number of opportunities to improve the application and assist the wider community and organisations with localised event response. Also, technical improvements could be made with the inclusion of vertically-pointing radar to the data feeds (www.weatherradar.co.nz/vpr).



Large scale weather events can have big impact on flood-prone urban areas.

our water, our future

Some of the big projects we're working on around the region.

ajor capital expenditure (capex) projects includes works which have a high monetary value, are required urgently, have significant technical or managerial complexity, or have greater levels of risk.

The selection and prioritisation of projects is based on a number of factors including meeting our service goals. If the project meets the following criteria, it becomes a major project:

- · high monetary value
- · time and schedule urgency
- organisational and managerial complexity the extent to which there are a significant number of managerial interfaces to be managed, and/or significant number of stakeholders to be managed
- organisational or client council risk high profile and carries a high degree of reputational risk and/or financial risk;
- technological complexity or high level of innovation.

Our Project Directors lead the development and delivery of the project and engage consultants and contractors to deliver the work. The team reports to the Major

Projects Governance Committee who are responsible for measuring and monitoring the performance of, and provide guidance to, the development and delivery of Major Projects in meeting our client councils Long-Term Plans, project scope and objectives with no harm to people or the environment.

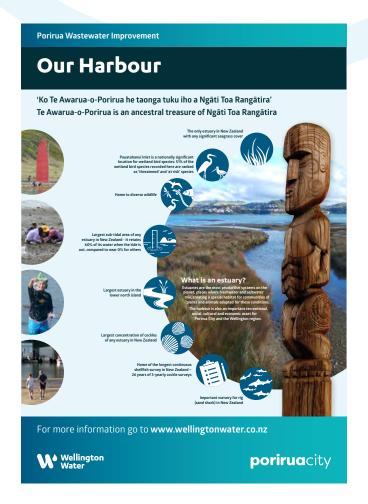
The timing of major projects can be affected by change to councils annual plans.

Our current capex programme includes:

- Silverstream pipe-bridge replacement (Greater Wellington Regional Council) – this project will replace the bulk drinking-water pipe-bridge located over the Hutt River at Silverstream. It will improve the resilience of our drinking water network and will completed by 2021.
- Cross-Harbour Pipeline (Greater Wellington Regional Council) – a project that proposes the construction of a cross-harbour bulk drinking water pipeline between Waterloo Water Treatment Plant and Wellington's Eastern Suburbs. This work will improve the resilience of our drinking water network and will be completed by 2025.



Porirua Wastewater Improvement information posters.



- Seaview wastewater treatment plant seismic strengthening (Hutt City Council) – physical work will start and finish in 2019 to strengthen the foundations and the building to protect against seismic events. This work will improve the resilience of the wastewater network.
- Porirua central business district stormwater improvements (Porirua City Council) – physical works to start in 2019 with wetland, pipelines and pumping stations to protect flood-prone properties in the area. Work will be completed by 2034.
- Aotea and Takapuwahia reservoirs (Porirua City Council) – the construction of two reservoirs to accommodate future growth, provide seismic and operational resilient for the drinking-water network. This work is planned to be complete by 2030.
- Porirua wastewater network improvements (Porirua City Council) – physical works will start in 2021 (to 2034) with improvements to the wastewater network. These works will prevent overflows to into streams and harbour to improve the health of our waterways and risks to public health.
- Pinehaven Stream stormwater improvements (Porirua City Council) – physical works will start and finish in 2020 with the improvement to Pinehaven Stream. This work will protect flood prone-properties in the area.

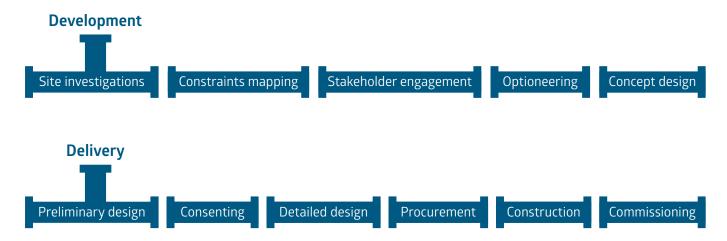
- Omāroro reservoir and Wallace Street pipeline (Wellington City Council) – physical works will start with the construction of a large buried reservoir and associated pipework. This work is planned to be completed in 2022 and will provide seismic and operational resilience, and accommodate future growth in the central business area.
- Kilbirnie stormwater improvements (Wellington City Council) – a new stormwater pipe has been installed and plans are being developed to build a pump station that would provide additional protection for flood-prone properties in the area.
- Karori wastewater network improvements
 (Wellington City Council) physical works will start
 in 2020 with improvements to the wastewater
 network. This work will be completed in 2023 and
 will prevent overflows to into streams to improve
 the health of our waterways and risks to public
 health.
- Moe-i-te-Rā reservoir and Bell Road pipeline (Wellington City Council) – a combined project to replace a 100-year-old reservoir and install the necessary connections to the existing network. Timing for this work is not yet finalised, but once built it will provide seismic and operational resilience, and accommodate future growth for our drinking water network.



Examples of the Moe-i-te-Rā Reservoir (Bell Road) Reservoir Replacement Project information posters.



The steps to develop and deliver a project are:



The development phase is the creative stage. It's all about collecting as much information on the project before undertaking optioneering and defining a preferred solution.

The first step in the development of the project is to establish a set of objectives which will provide guidance to the project's development and delivery team. The team then sets about collecting information that will inform the options. This includes site investigations, reviewing operational needs, environmental and ecological surveys, and engaging with stakeholders to understand their expectations.

Options are developed and measured against the scope and objectives to determine which provides the optimum solution. This work often involves several iterations, gathering further information and consultation with stakeholders.

Once a preferred option is selected and approved, a concept design is produced to summarise the proposal.

The delivery phase includes the more mechanical process of taking the preferred option and turning it into an operational feature by producing a design which can be consented, tendered, constructed, and commissioned.

The design is progressed in two stages. Initially, a preliminary design is prepared which provides further detail to the concept and provides information against which consents can be sought. Once consents are given, the detailed design can be prepared and includes any consent condition requirements. Preparation of a detailed design will include giving consideration to the safe means to build and operate the proposed works and provide documentation which will allow for the work to be procured.

Construction of the project, when the detail on the drawings comes to life, will include several months of planning to get approvals for traffic management

and environmental plans. A key element of the construction process is the commissioning. The complexity of the commissioning varies from project to project, but completing a project and handing over to operations will be a measure of success of the design development and construction planning.

2018-21

Statement of Intent update

We'll complete major stormwater projects by 2021: Tawa (commence construction); Porirua (commence construction); Kilbirnie (stage 3 - subject to funding) (SOI measure 27)

UPDATE: Tawa (in catchment investigation phase). Porirua (commenced consent and detailed design). Kilbirnie (stage 1 complete, stage 2 delayed due to further work to establish best option).

We'll complete major wastewater projects by 2021: Dixon Street (complete); Seaview (treatment plant seismic strengthening); Porirua (treatment plant consent renewal); and Hutt (main collecting sewer complete) (SOI measure 28)

UPDATE: Dixon Street (pumping stations is 85 per cent complete). Seaview (to commence in January 2019). Porirua (options to reduce overflows at the wastewater treatment plant is underway).

We'll complete major drinking water projects by 2021: Omāroro (complete detailed design - subject to funding); Bell Road (commence detailed design); Aotea (complete preliminary design); and Silverstream (commence detailed design) (SOI measure 29).

UPDATE: Omāroro (commenced detailed design). Bell Road/ Moe-i-te-Rā (pipeline design 90 per cent complete, awaiting consent conditions before tie-in design can be complete). Aotea (completed consents). Silverstream (completed preliminary design. Once the preferred option is agreed, commence consenting and detailed design phases).

how we're helping communities prosper

Our Half-year Report to 31 December 2018.

The development of 'Our water, our future' (the 2018-21 Statement of Intent) has helped us to focus on areas where we can make the biggest difference to our customers (the residents of the metropolitan Wellington region) the interactions they have with us, and the way we deliver our services.

The first half of the year (up to 31 December 2018) has been dedicated to improving the overall customer experience.

As we work with our client councils and suppliers, we've been fine-tuning a set of customer behaviours that will help us to improve our interactions with customers and their overall customer experience. These behaviours (honest, caring, and authentic) have been developed with our customers and their experiences in interacting with the services we provide in mind.

The biggest change is the way we deliver our services to our customers. The implementation of our service delivery strategy has helped us to focus on putting the customer at the heart of everything we do. We're on track to: delivering an Alliance approach to network maintenance and operations by June 2019; selecting a collaborative capital expenditure (capex) Contractor Panel to start work in 2019/20; and consolidating our wastewater treatment plant management contract by July 2019. This approach will help to improve customer service delivery and the customer experience, create efficiency in the delivery of our work, and deliver better value-for-money for our client councils.

Over a year ago we started to actively engage with possible Alliance partners and other stakeholders to design an Alliance model that will help us to achieve all this, and also continue to incentivise our partner to deliver ongoing benefits and value for our customers and client councils in the longer term. We landed on a model that sees a contractor embedding itself within Wellington Water and providing resources, systems, and expert know-how to supplement our existing network maintenance capabilities and strengths.

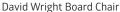
We were pleased to announce (in September 2018) that Fulton Hogan had been selected as our preferred partner, and we signed an Interim Alliance Agreement (in late November), cementing this relationship. This Alliance is a new way of working and is something of a game changer in the industry, and one we're really excited about.

Following Local Government Minister Nanaia Mahuta's announcement of the reform of drinking-water, we were pleased to be able to bring together the views of our wider region in our proposal for improvements to the water sector in New Zealand. As the Government progresses with these reforms, we'll work with our client councils and neighbouring councils to identify opportunities to deliver better water services for customers.

Our Half-year Report highlights our progress against the goals we set ourselves in 'Our water, our future' (the 2018-21 Statement of Intent) and covers the period 1 July 2018 to 31 December 2018. To read the report visit wellingtonwater.co.nz/about-us/company-documents/

Our Half-year Report shows some great progress made towards the goals we've set ourselves in 'Our water, our future', and we're looking forward to rolling up our sleeves and getting stuck into the remainder of the 2018/19 year.







Colin Crampton Chief Executive

delivering value for money

Through collaborative partnerships.

- By Aimee Digges La Touche, Senior Procurement Specialist, Finance and Procurement.



t any one time, we can have up to two hundred capital works projects in various stages of completion, from investigation to closure, and 40-60 construction projects – where diggers turn up and new pipes or pumps go into the ground.

To get all this work done, we manage \$60-80 million of expenditure on capital works projects on behalf of our client councils, which includes renewing or improving the infrastructure that treats and delivers safe drinking water to homes, carries our wastewater to treatment plants, and protects cities from flooding.

How we go about managing these projects and their associated

budgets have a significant impact on demonstrating value-for-money to our client councils. That's why, this year, we're entering into a new way of working with our contractors on delivering this work.

In the past, a project would be put to open-market tender. The project manager and evaluation team would review the tender responses, and then, using a framework that weights a variety of financial and non-financial factors (like how they'd do the work, their experience, and, of course, the cost) and then make a decision on who would be most suitable to complete the project.

But the competitive tendering system has its drawbacks. There's

a lot of work that goes into developing and evaluating the tender documents, and the contractors invest a lot of time in tendering for work that they may not win. This makes it difficult for them to plan and invest in their business (when they don't know how much work they've got coming up). A 'boom and bust cycle' can develop, where at some times of the year there is plenty of work, but no capacity. These are the right conditions for high tender prices. Conversely, a contractor desperate to find work for their team may submit a low bid or step outside their comfort zone, only to experience real problems when they're hit by an unexpected event.

These factors can be exaggerated by an annual financial cycle – where you have a budget for a year and you have to spend that money within the same financial year. It's easy to 'run into a wall' towards the end of the year, when for reasons often outside our control, not enough work was completed throughout the year. This is one of the things the Office of the Auditor General has noted as a concern within the public sector across the country.

We wanted to work more closely with the contracting community to come up with a better system, one that recognised the collaborative partnership we are in, and that could provide better service delivery to our communities and value-for-money for our client councils in the long run.

To achieve these outcomes we are currently establishing a panel of preferred suppliers (who have the capability and capacity) to deliver our 'business as usual' capex works. Under this procurement model, panel members are allocated an even split of the capex programme work – eliminating the inefficiency of tendering for individual projects.

Through this new way of working, we want to see transparent cost estimates, cross-supply chain collaboration to deliver the work programme efficiently, an uplift in our regional capability, improved standardisation of common processes, further industry-leading innovation, and close working relationships with our engineering Consultancy Panel to improve project outcomes.

Our Capex Contractor Panel has been set up as three teams of three separate companies.

- Team one: E. Carson and Sons, G.P. Friel, and Brian Perry Civil.
- Team two: Fulton Hogan, HydroTech Group (third member to be confirmed).
- Team three: Construction Contracts Limited, E.N. Ramsbottom, and Juno Civil.

2018-21

Statement of Intent **update**

We will deliver our service delivery strategy by implementing the Alliance, implementing the contractor panel, and introducing a regional approach across all wastewater treatment plants.

UPDATE: We'll deliver our service delivery strategy by implementing the Alliance, implementing the Contractor Panel, and introducing a regional approach across all wastewater treatment plants (SOI measure 43).

UPDATE: Interim Alliance Agreement signed with Fulton Hogan in November 2017 Contractor Panel framework agreements with three contractor leads (Fulton Hogan, E Carson & Sons, and Construction Contracts Limited) signed on 14 December 2018. In March we announced Veolia as our preferred Wastewater Treatment Plant supplier.

From 1 July 2019, these are the companies you'll see out working on the streets behind Wellington Water banners and signs, and managing traffic around their sites. In future issues of Te Kaitiaki Wai, we'll introduce our panel members.



Meet Aimee

Aimee Digges La Touche is a Senior Procurement Specialist at Wellington Water. Her background is in law and she has experience in infrastructure and construction procurement, previously working for a large multi-civil company.

Aimee led the Capex Contractor Panel project. Her role has included developing the strategic direction of the panel, engaging with internal and external stakeholders, issuing the Request for Proposal, evaluating tender responses, negotiating commercial agreements and now working closely with the contractors to implement the Panel before physical works commence on 1 July 2019. She has enjoyed working with the market to co-design the mechanisms of the model and will sit as a Wellington Water representative on the Contractor Leadership Group.

working towards a common goal

Co-designing health and safety with our supply chain in a complex operating model.

- By Colin Crampton, Wellington Water Chief Executive.



The group of contractors, suppliers, consultant and Wellington Water leaders at the bi-monthly health and safety leadership forum.

The problem

When Wellington Water was first established in late 2014 we inherited the systems from two previous operating entities. The contracting model that we ran was a traditional hierarchy system. By using this model we identified a weakness in how we were engaging with our contractors and consultants – potentially affecting delivery of services and health and safety, as we weren't all focussed on one vision - looking after each other. We were also facing the

risk of losing contractors to major regional infrastructure projects.

We wanted to create a peer-topeer approach where we built long-term relationships based on collaboration and respect.

Bringing everyone together

The number one thing we had to establish for this relationship forum, was to build a relationship with everybody who worked with Wellington Water. I visited them

all personally to let them know we wanted to have a conversation outside the contract.

We wanted to get the leaders of business to come in and talk about the issues that were relevant to the work we were doing.

We brought together 15 contractors, suppliers and consultants for the first time in February 2016, and have had ongoing meetings with them every two months since then.

Michelle Hoffmann, Project
Manager for EN Ramsbottom
Contractors said that "in the very
first meeting nobody wanted to
talk, because there was still a lack
of trust. We were scared if we said
the wrong thing it may come back
to get us in another way, so people
still kept everything close to their
chest."

"Now conversation flows freely, ideas are shared and there's no fear of retribution," says Michelle.

We make decisions together, a co-design process – it's not just Wellington Water making decisions and telling everyone what to do, it's a collaborative model.

As part of the process we wanted to build honesty and transparency into the way incidents on site are reported. So, we created an instant blog where anyone could let the rest of the group know about any near-misses or incidents that had happened on their site. People needed to build trust that they were not going to be judged or have to defend themselves by being open.

A perfect example of this is the time that Michelle got an email from G.P. Friel about double decker buses in Wellington City.

"We got an email from G.P. Friel. One of their guys had been working in Wellington City during the rollout for the new double decker buses. They noticed there was an issue when designing a traffic management plan and allowing for double decker buses, as it narrows out the site. They advised us of the need to be more mindful of the double deckers, whereas I would never had thought about that until I had come across the issue. So, somebody else has experienced the problem, and they've shared the issue and the solution with us."

What we've learnt

It takes time to move from a hierarchy to a peer-to-peer operating model. Trust has to be built, and this doesn't happen overnight. But, we've seen some great results, and I know this model has the potential to continue to improve safety, health, and productivity for Wellington Water and our contractors.

Some of our key successes include an increase in near-miss reporting and sharing of information, ideas, health and safety models and plans; the upgrading of contracts with suppliers and consultants to reinforce the peer-to-peer model; and our contractors reporting wider benefits for their own businesses and other clients that they work with. One thing we're continuing to work on is how the peer-to-peer relationship will be managed when it's really tested, for example, after a significant incident.



Colin Crampton, Wellington Water Chief Executive



David Howard, Managing Director Construction Contracts Ltd



Michelle Hoffmann, Project Manager EN Ramsbottom Contractors



Gerry Friel, Managing Director G.P. Friel Ltd

Health and Safety Leaders' Forum

Colin Crampton, Wellington Water Chief Executive, David Howard, Managing Director Construction Contracts Ltd, Michelle Hoffmann, Project Manager EN Ramsbottom Contractors, and Gerry Friel, Managing Director G.P. Friel Ltd all presented at the Business Leader's Health and Safety Forum in October 2018, talking about the unique operating model.

You can watch the video here: www.zeroharm.org.nz/case-studies/wellington-water



Colin Crampton, Wellington Water Chief Executive (right), and Graeme Johnson, Fulton Hogan Chief Executive, signing interim Alliance agreement.

ur new Alliance partnership with Fulton Hogan will improve the quality of our services, and will provide better value for money to our client councils and ratepayers. Within this model, our partner will be directly invested in our success as we work together towards shared goals and outcomes. This joint way of working will mean we have more consistency in service delivery across the region, and will give us more flexibility and control to work effectively within a changing water sector.

By bringing another business into the Wellington Water fold we'll be able to share knowledge and skills so that we get the best of both. We'll be able to leverage the best of each other's resources, systems and processes, as well as explore new approaches and continue to develop for the future.

The timing and strategic thinking behind the Alliance partnership fits alongside the other work streams of our Service Delivery Strategy. With the capital expenditure panel kicking off on 1 July 2019 and the outsourcing of the Wastewater Treatment Plants starting in 2019, we are working towards our vision of delivering a high standard of service to our customers in a consistent way across the region.

We've formed an implementation team that's made up of key people across Wellington Water and Fulton Hogan. The primary focus for the implementation team is to deliver a seamless integration. So, come 1 July, our customers will receive the same level of service, and then over time they'll be experiencing a much-improved level of customer service.

Besides increasing our customers' overall experience, the other main objectives the Alliance Partnership will be working towards are:

- · a consistent regional approach
- · increased value-for-money
- establishing a depot network across our region to strengthen our operational and emergency management resilience.

We are in the process of developing new systems, process data and technology to support these objectives, as well as defining the new structure. We aim to have the structure finalised in March, and then we will be recruiting to get the best people in the jobs to look after our most precious regional resource.

2018-21

Statement of Intent update

We'll deliver our service delivery strategy by implementing the Alliance, implementing the Contractor Panel, and introducing a regional approach across all wastewater treatment plants (SOI measure 43).

UPDATE: Interim Alliance Agreement signed with Fulton Hogan in November 2017. Contractor Panel framework agreements with three contractor leads (Fulton Hogan, E Carson & Sons, and Construction Contracts Limited) signed on 14 December 2018. In March we announced Veolia as our preferred Wastewater Treatment Plant supplier.

be a water lover

We've been profiling Wellingtonians who love and appreciate our most precious and essential resource – water – all summer long.

ur Summer Demand campaign, Love Every Drop, is based on the good outcome of being able to enjoy and use water all summer long, rather than the bad outcome of running out and having to introduce further water restrictions like sprinkler bans or outdoor water use bans.

From the exotic wilderness of the Zoo in Newtown to the Splash Pad in Porirua, we've been asking everyday Wellingtonians and businesses about what they're up to with Wellington water, their tips on responsible water use, and why they love it so much.

Splash Pad

The Splash Pad at Aotea Lagoon in Porirua is a great place for the community to spend time and enjoy water with minimal water wastage. The cool thing about the Splash Pad is that the water is on a reticulated water system. This means the water recycles itself back through and is used again and again. The water is collected in a tank and filtered twice, given a little dose of chemicals to make sure it's clean and then recirculated back into Splash Pad to be enjoyed.



Wellington Zoo

Wellington Zoo has been on a mission to reduce their water consumption, and they've been doing a great job. They have about fourteen 25,000-litre rainwater tanks that collect water from all the roofs around the zoo. This helps them provide water for their animals and natural habitats, as well as recycled rainwater in their bathrooms. They are also the world's first Carbon Zero Certified Zoo.



Tawai Community Garden

Tawai Community Garden is a shared space in the heart of Trentham in Upper Hutt, where local residents can grow high-quality fruit and veges. Having good quality water is important to help all the plants and veges grow, but so is mulching and water responsibility to ensure the plants make the most of the water they receive.



Richard and Red

Richard and his son Red are from Titahi Bay and built their own pond in their backyard. The pergola on top of the pond catches the rain water which fills the pond up. The pond is full of fish and tadpoles, and the family gets to enjoy the water in the pond in a sustainable way.





Ruby Willis is a rower from Petone. She represented New Zealand in the 2015 Junior team in Rio, and was shocked at the poor water quality over there. They weren't able to drink any of the water, had to brush their teeth with bottled water, and even had to put their drink bottles in plastic bags to avoid contamination. Her experience helped her appreciate the water quality that is at home.

Visit **loveeverydrop.nz** and you'll be able to see all our water lovers' videos, and get tips on how you can easily look after water at home.

2018-21

Statement of Intent update

Our customers will reduce the amount of water they are using at home because they have the information they need to be able to make informed decisions and change their behaviours (SOI measure 5).

UPDATE: In quarter two we ran our Summer Demand marketing campaign, targeted at our customers that provide important water conservation messages. We will measure the success of these campaigns as the year progresses.



An important part of our job is getting out into the community and meeting with our customers. This is a great way to hear about any concerns they might have, answer questions, or provide them with helpful information about the services we provide.

Saturday 2 February – two festivals in one day!

In the summertime we try to make the most of the beautiful weather and try to interact with our customers as much as we can. On Saturday 2 February we were lucky to be invited to attend two festivals in one day! So we got the team together and set up our stalls at two community events in Porirua and Lower Hutt.

Smaller community-based events are a great way to connect with our customers. We took our resilience "Water Hero" information along to the Titahi Bay Beach Festival and used the opportunity to discuss the importance of storing 20 litres of water, per person per day, for at least seven days.

We also joined forces with Regional Public Health and spent the day handing out water to very hot and thirsty festival goers at the twenty-fifth Te Ra o te Raukura in Lower Hutt. Thousands of people enjoyed a fun-packed day of cultural performances, various food stalls, games and entertainment in Lower Hutt.



Photo: Petone Fair



Saturday 16 February - Petone Fair

Lower Hutt's Jackson Street was thriving with people looking for food, artwork, crafts, and fairground rides at the 28th annual Petone Fair. An estimated 30,000 people visited the fair this year. We took our resilience Water Hero information along and encouraged people to enter our 'win a 200L emergency water tank' competition.

Saturday 23 February – Khandallah Park turns 100

Wellington's Khandallah Park celebrated its 100th birthday with a picnic in the park. This was a wonderful opportunity to connect directly with residents and show them the work we've been doing in the form of the installation of an emergency water station that will help their community to be more resilient in the event of an earthquake. We opened up our emergency community water station and had our 5000L water bladder on display so people could get a better understanding of how the station and bladders work together in supporting the community following a large-scale emergency.







but what do our customers think?

Taking an outside-in look.

e're trying to make sure putting customers at the heart of everything we do becomes part of the way we do things at Wellington Water.

To help us do this, we've been thinking, and talking, about what good and bad customer service looks and feels like. These discussions have resulted in the creation of a set of customer behaviours – how we want to treat and interact with customers to make sure they are receiving the best possible service.

The three behaviours are:

- honest
- · caring
- authentic.

You can't have conversations about customer behaviours without asking the customer. So, we sat down with members of our Customer Panel and asked them what their thoughts were on our behaviours, and the work we do. Keep reading to get a customer perspective.

Meet Ginny



Tell us a bit about yourself.

My name's Ginny and I live in Naenae, Lower Hutt. I used to work as a Personal Assistant for an engineer's firm, but I'm now retired. And I love cats.

Before you were on the Customer Panel, did you ever think about water? What was your relationship with it?

I didn't really think about it. I had a bit of trouble with drains, but they were all fixed so never thought much about it. Turned on the tap and water came out!

Have your views changed since being on the panel? If so, how?

Yes, most definitely. I'm a lot more aware of it. We had a burst water main at the house last year, and a contractor from Wellington Water came around and I got to talk to him and found out a bit more about what was going on. It was really good because I felt connected, and being on the panel, I knew a bit more about what was going on.

What's the most important thing for Wellington Water to get right?

The supply of good drinking water I think is the most important. Everybody expects it, and with the scares that have been in the other parts of the country, particularly Havelock North, we don't take it for granted as much anymore. But I do think good drinking water is the most important.

But we mustn't forget everything else, like the stormwater. Especially with all the rain we have.

What do you think Wellington Water is getting right?

Having seen it from the inside, I'm impressed with the level of care that they take. We had a few people come and talk to us about a particular project they'd done in Kilbirnie, and the thing they looked for and improvements they made, as a recompense for the disruption I thought was brilliant – moving a trampoline for somebody, or

improving their footpath. It was good.

We've developed some customer behaviours internally and we're trying to live them, but actually we're really keen to hear what they mean to our customers.

What does 'caring' mean to you?

Communication, being responsive and honesty. It means talking to the customer. So often contractors do things and don't really explain why, but the fact the Wellington Water, as a whole, does explain why, is really important.

What does 'honesty' looks like to you?

Trustworthy, believable and loyalty, from the contractors to Wellington Water. It works both ways, but every so often you'll find contractors that will be dismissive and say 'Oh don't worry about what they, so it doesn't matter', but instilling loyalty is valuable.

What does 'authentic' mean to you?

Being real and dependable. It's about talking to the customer, being honest, and working with the customer. If you've got to dig up a particular path, put it back again!

What does having clean water mean to you?

It means having water that is safe to drink for everybody, including the animals.

What would you like to say to the people at Wellington Water, about the work they do to keep our water safe and clean?

You're doing a fine job, we appreciate what you're doing, keep it up, and above al,l communicate!

Meet Grant



Tell us a bit about yourself.

My name is Grant and I live in Korokoro, Lower Hutt. I'm a father of two, and I work as a business analyst.

What does having clean water mean to you?

It's absolutely essential, you need it to live and it's important having reliable water that's provably clean. As I've got young children, it's important that they avoid the possible health problems that unclean water can give, and that they're brought up in a clean, healthy environment. It's also important that the sewage is taken away and that we have clean natural rivers.

Before you were on the Customer Panel, did you ever think about water? And what was your relationship with it?

Not as much as I do now. I did have several questions about our property when we moved in, to do with pipes and sewage and stormwater, but other than those specific instances, not much.

Have your views changed since being on the panel?

It's been quite a relief that Wellington Water does care about making sure we have clean water, making sure we have natural resources, and making sure that our sewage is taken away.

Being able to peer behind the curtain a little bit and seeing the people and processes that make it happen has been something that has set my mind at ease.

It's good to know that these things are in the hands of competent people and that they're doing a good job. I enjoy the parts of the panel where we talk to the people who work for Wellington Water and the contractors as well.

What do you think Wellington Water is doing well in terms of looking after the community?

Making sure that things are standardised between the different councils. Knowing that the different councils are all working together and using the same processes is important to me because it means that there are fewer things likely to go wrong. We're a large interconnected region and one way it's given me confidence is that in an emergency we've got a plan for our drinking water. If there's an earthquake we know roughly what we're going to do, how long it's going to take and who's going to be involved.

What does 'caring' mean to you?

Being observant and making sure you follow up. Whenever you interact with someone it means taking the time to talk to them, getting their input and potentially making changes if necessary. It does need to be a two-way street between Wellington Water and the public.

What does 'honesty' look like to you?

If you're going to be honest it's saying what you plan to do. If a problem comes up (as it so often does in the messy real world) tell people about it, and if it changes anything (delayed or moved up) tell people why the changes have happened. And finish off by making sure everyone understood.

What does 'authentic' mean to you?

Wellington Water has many different people they're going to interact with. Being authentic with all those people will be difficult, but what would show they're on the path is they meet up regularly with the people, publish and make known feedback. An honest, nononsense attitude. Owning up to problems. Saying what you're doing to fix them. Apologising when necessary. To make sure people know that Wellington Water [the people] is human/sometimes mistakes are made, projects change, people move on, things fall behind the cracks. But here's what we're doing to minimise or fix it.

And continuing to do that.

Sometimes it's tempting for an organisation, such as Wellington Water, to go through the process for a couple of years and then, once complaints drop off, to quietly let it subside as less important.

I think continuing to have the barefaced conversation with people for an extended period of time is one way that Wellington Water is authentic into the future.

What would you like to say to the people at Wellington Water, about the work they do to keep our water safe and clean?

Water is critical for life and as someone who has worked on projects for infrastructure, it's often a thankless task, but it's really important and I appreciate the work you do.

Meet Sarah



Tell us a bit about yourself.

I'm Sarah and I live in Newlands, Wellington. I have three children, work as a receptionist, a toy librarian, and photographer. I love walking and crafts such as crochet!

What does having clean water mean to you?

It means everything because we drink a lot of water and it's especially the drinking water that matters to us, because we like to stay really hydrated. It's a really scary thought whenever we don't have water or it's cut off you realise just how much you use it. It's especially the drinking water, but also the washing and flushing the toilet. It's absolutely vital we have it.

What has changed for you since being on the Customer Panel?

I know lots of thing now! One of the things that I've enjoyed was we had a set number of marbles and had to put them in priorities. So, we were presented a range of things that Wellington Water have to focus on and prioritise, the things that we have to pay for, and we were asked how would we prioritise them if we were Wellington Water. It's actually some really big decisions because there are so many things that need money and upgrading, and there are so many things that are important, and it was difficult to choose which things get cut out or get less funding. It's been really interesting learning about the challenges that Wellington Water faces and learning about things I never would have considered before.

After doing that exercise, what do you think is the most important thing for Wellington Water to get right?

Drinking water is the number one priority, it's absolutely vital because we can't live without water. But it's interesting because the stormwater and wastewater is so important as well, so it's really hard to narrow it down because everything is important.

Has anything ever gone wrong with your water at home? What happened, and did you deal with Wellington Water?

We had funny coloured water a few months ago, it was very white and we weren't sure if this was normal or not normal, so we ended up buying some bottled water. We called the council first, and they said they'd get someone around to deal with it, and about four days later I called again and they said that Wellington Water had looked into it and taken care of it. However the water was still not clear, so we weren't sure if the water was ok to drink or not.

It would have been good to have someone follow up with us informing us that the water was safe to drink, because you're not sure if it's just air in the water or if there's something wrong with it, especially as it took a couple of weeks to return to normal and we were drinking bottled water over this time.

What does 'caring' mean to you?

Empathetic, open, smiley and really good communication. When people are informed of things; they have an understanding and everything works much better. Communication has two things one is long-term when you know something is going to or has to take place, if there's the communication, then people go 'oh that's why that has to be done, I understand, I can put up with the inconvenience because I know it's for my long-term benefit'. The other is short-term communication, like

in an emergency when you inform people 'this is what needs to be done, you're going to be without water for two hours', just so that people know what's going on.

What does 'honesty' look like to you?

If you're honest about why things have happened or are going to happen then people feel kept in the loop and they'll understand and accept it better. But in the same line, if you say you're going to do something and then it doesn't happen, honesty is about saying 'we did say we were going to do this, and unfortunately we can't keep to this because of... but this is the new plan or target' so people feel like they're kept in the loop.

What does 'authentic' mean to you?

It's more linked with the other two. If you are honest and caring and communicate well, that is authentic.

What would you like to say to the people at Wellington Water, about the work they do to keep our water safe and clean?

Thank you! It's nice to know our water is safe and everyone is taking care of all these things so we don't have to worry about them. I also really love the ad campaigns and getting messages out. We're learning things all the time and I think it's really good to communicate to people, as there's lots of things you're not born knowing, and it's really important to have that information out there.

2018-21

Statement of Intent **update**

We will build a customer culture by developing consistent customer behaviours and embedding these behaviours in our company and alliance (SOI measure 33).

UPDATE: We have developed customer behaviours (honest, caring, and authentic) for the company. These have been finalised and presented to all staff.

building an underground picture

The importance of data

ne of the tricky things about water infrastructure is that most of it is underground. So, having accurate records of 'what is where' is even more important when you can't see things.

Our Information Directorate team (ID team) has two roles: 1) to automate and simplify information, so there is consistency and services can be delivered efficiently for ratepayers, and 2) to make sure the information provided helps our people to make the right decisions when they're working in their roles.

From keeping track of service performance, to updating information on all the pipes and pump stations across the four cities, the ID team is kept very busy.

One of the biggest challenges for the team has been working across the different information management systems and protocols of the different councils. We're working to standardise the information we take from councils within our systems, as that helps us to manage all facets of the work across our business.

When it comes to customer information, the ID team is responsible for collating and reporting data from our service teams. These reports are part of the customer performance framework that we use to make sure we're meeting our client councils' expectations.

Below is an example of one of the reports we produce; 'Service requests per month, by priority' (P1-3) demonstrates how many calls we get about events such as leaks and bursts.

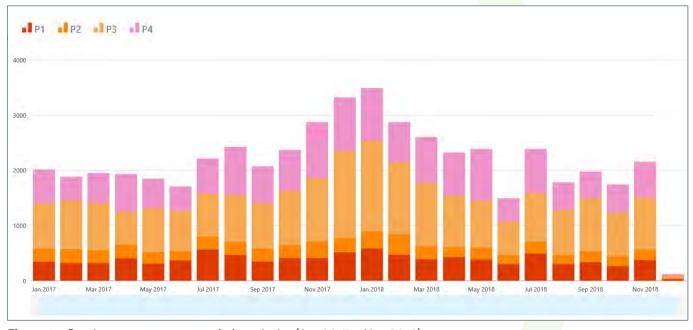


Figure 1 – Service requests per month, by priority (Jan 2017 – Nov 2018).

Response work for leaks and bursts is prioritised based on a number of factors, including: the type of leak (wastewater, stormwater or drinking water), size of the leak (how much water is leaking), and the location of the leak (is it on a main road or in a suburban cul-de-sac). Leaks on private property are the responsibility of the owner). P1 leaks are highest priority and P3/P4 are low priority.

To make more efficient use of funds, low priority (P3/P4) leaks will often be batched – meaning similar types of repair will be done at the same time. This saves on costs like equipment use, labour, or materials like asphalt.

The interesting thing about the trend over time is how the total number of jobs jumps when the weather dries out – particularly lower priority jobs. Leaks are easier to spot in dry weather, so calls increase.

We also track the number of days it takes to complete the repair. This is also one of the performance measure (key performance indicators) that councils keep an eye on.

As noted, councils have to balance speedy repairs with the cost of having the resources on tap (excuse the pun). Figure 2 shows that 90 per cent of repairs are being completed within 15 days of being recorded.

We look after the three waters: wastewater, stormwater, and drinking water. Drinking water repairs make up the majority of service calls. One reason for this is then when drinking water pipes are damaged, it's usually very visible. The water in the pipes is under pressure, and it usually makes its way to the surface quickly. Of course, people are very quick to notice when the water is out - but wastewater problems such as blocked pipes and stormwater problems such as flooding on private property are also top priorities for our service teams when they happen.

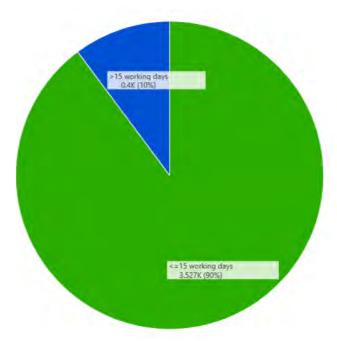


Figure 2 – Job completion by number of days (from July 2018).

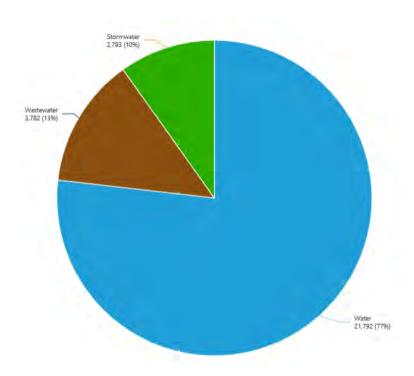


Figure 3 – Service request by water (July 2018 to date).



bridging the gap

How we're supporting gender equality in the engineering sector.

eople work at Wellington
Water because they want to
make a difference, and we
believe that proposition appeals to
all genders.

Currently, we have a gender imbalance with around 24 per cent of our employees being female, and around 76 per cent being male. We want to encourage more women to work at Wellington Water because great teams are made up of a range of people with different skills, views, and experiences. This will help us to be creative and innovative when solving problems.

Part of gender equality is not having a gender pay gap. As an organisation, we support pay equity for the same level of work. We monitor our remuneration and pay equity, and we currently have a gap in favour of females across the organisation.

We're keen to understand the reasons driving gender imbalance within the organisation. We continue to encourage women to join Wellington Water, particularly in the engineering and operations roles.

One way of increasing understanding and to help us identify areas of opportunity to increase diversity was to develop the Women in Engineering (WinE) group, so in July 2018, WinE was

born. The first step was to set up a committee and decide what we wanted to achieve.

We wanted this group to focus on giving women a safe place to talk, to empower, to encourage, but also be inclusive. At the start it was decided that although the group title says women it does not limit involvement to only women; we all benefit by including a diverse group of people and their perspectives. It was agreed that we would have a mixture of 'events', some womenonly, and some open to everyone. This led us to develop three objectives:

- provide a safe place for women to talk:
- provide people leaders with ways to build diversity (in all its forms); and
- 3. give women the tools to build their confidence.

Our first WinE event was held in early September 2018. This was a chance to get to meet women from across Wellington Water, discuss the intent of the group, and to share stories and experiences.

In November and December we hosted two workshops run by HR specialist Jess Stuart. Jess has a passion for helping to develop women in leadership. The first workshop was about the Imposter

Syndrome. Open to everyone, this workshop looked at what Imposter Syndrome is, why it affects so many people, and how we can navigate those nagging feelings of self-doubt to be our best and unlock our potential.

The second workshop was Women in Leadership – this was only open to WinE members. This session looked at what it takes to be a good leader, the critical skills needed, the unique issues women in the workplace face, and how we can navigate this to achieve our potential.

The final thing we did as a committee in 2018 was to discuss and provide feedback on the revised Sexual Harassment Policy before it went to the wider organisation for consultation.

2018-21

Statement of Intent **update**

We'll focus on gender equality by removing barriers to workforce participation to enable more gender equity across all functions in the organisation (SOI measure 36).

UPDATE: For the period (1 July – 31 December) we monitored five functional teams. Of these five teams, two have achieved a minimum of a 30 per cent gender balance.



here is no doubt that within our organisation, and across the industry, health and safety is a top priority. We firmly believe there's nothing we do that is worth getting hurt for.

Our health and safety vision 'people first, every time' reinforces this, and we've been working hard to make sure our vision is well understood throughout our business and with our wider Wellington Water whānau.

We use incident reporting data to help us map out potential areas of risk, and when patterns (like a nearmiss) start to emerge, put interventions in place to keep our people safe.

Towards the end of 2018, we had two lost time injuries reported, one of which was an eye injury where a foreign object entered a person's eye, while they were wearing eye protection glasses. We've noted a trend of eye injuries occurring across the business, often when cutting and grinding.

While the overall frequency of eye injuries are low, the consequence could be significant, so it's critical that we pay careful attention when a pattern starts to emerge.

We dug into the issue, and we received feedback from our people (who use eye protection on a regular basis) about the inadequate protection our current safety glasses offer and that they're 'okay' for the job', and 'its best we've got, so we'll make do'.

In our view that's not good enough. So, to address this we've been working with suppliers and our people to trial the use of different types of ergonomically-designed eye protection glasses that are better suited to our working conditions.

2018-21

Statement of Intent update

We'll improve the health and safety of our people by reviewing our Health and Safety critical risks and applying controls to manage risks to an acceptable level (SOI measure 35).

UPDATE: Two critical risks have been selected: Traffic Management, and Mobile Plant and Equipment. Traffic Management phase one has been completed and actions approved by the Health and Safety Leadership Forum. Work is progressing for Mobile Plant and Equipment.



service goals

We deliver our services by focusing on three customer outcomes: safe and healthy water, respect for the environment, and resilient networks that support the economy.

Our performance in these areas is reported through 12 service goals, four for each outcome.

How we're tracking against our service goals in 2018/19:

On Track

Some concern

Off track

Outcome: Safe and healthy water

		We provide safe and healthy drinking water	Stay the same	•	•	•		
Safe and Healthy Water	2	We operate and manage assets that are safe for our suppliers, people and customers	Stay the same	•	•	•	٥	۵
afe and He	W	We provide an appropriate region-wide fire-fighting water supply to maintain public safety	Stay the same	•	•	•	٥	۵
v		We minimise public health risks associated with wastewater and stormwater	Stay the same	6	6	•	٥	۵



We are compliant with the New Zealand Drinking Water Standards. The Regional Water Safety Plan (WSP) will prioritise improvements that mitigate drinking water quality risks. The WSP is 95% complete and will be submitted to the regulator in November. All drinking water quality issues have overview by the newly formed Drinking Water Safety Committee.



We experienced no lost time injuries or serious near misses in the first quarter of 2018/19. The critical risk projects have continued to progress, with traffic management and vehicles/mobile plant being the two critical risks under review. The project teams are developing industry designed solutions to mitigate the risks; they will be presented to Senior Leadership Team (SLT) in November. The change in service delivery presents challenges and opportunities for the health and safety function. We will work with the new alliance partner, Fulton Hogan, and other suppliers to ensure we can continue to improve our culture and system performance.



Identification and confirmation with the Fire Service of critical hydrants that will be part of ongoing hydrant performance testing across the region is an ongoing work programme. When non-compliant hydrants are found they are prioritised for upgrade works. A pilot study has been carried out to identify and prioritise fireflow availability with a region wide plan scheduled for completion this financial year.



There are network capacity and condition issues that cause wastewater overflows and result in contamination of urban stormwater catchments. This can result in public health concerns. Work is ongoing throughout the region to minimise the number of wet weather overflows. Eliminating dry-weather overflows continues to be a challenge.

How we're tracking against our service goals in 2018/19:

- On Track
- Some concern
- **♦** Off track

Outcome: Respect for the environment

	lent	(1)	We manage the use of resources in a sustainable way	Improve	•	•	•		
	Respectful of the environment		We will enhance the health of our waterways and the ocean	Improve	•	•	•	۵	۵
ectful of th	2 3	We influence people's behaviour so they are respectful of the environment	Improve	•	•	•	۵	۵	
	Resp	×	We ensure the impact of water services is for the good of the natural and built environment*	Improve	•	•	•	۵	۵



Per capita demand for water is showing an increasing trend in all areas except Wellington. If the overall trend continues, it is likely that the regional limit of 374 L/p/d will be exceeded within the next couple of years. If this occurs, we will need to consider accelerating supply/demand initiatives to achieve a sustainable water supply.



We currently monitor freshwater sites and beaches, and some of these sites exceed pollution target levels. This is a long-term ongoing initiative to identify and remove sources of pollution. Test results from freshwater monitoring sites has shown a decline in water quality in the past 12 months. We are mapping a pathway for the enhancement of our networks to achieve the adopted standards. In the last quarter a request for proposals from preferred contractors was prepared for a future contract for the operation and maintenance of all wastewater treatment plants in the region.



We developed stormwater and drinking water social marketing campaigns at the end of 2017/18 which were out in market at the start of 2018/19. The 'Where does it go?' stormwater campaign nudged people to stop and think before they undertake activities using the stormwater network, showing connections between their actions, our networks, and the environment. Our 'Love Every Drop' campaign showed customers where their water comes from, educated them on how to look after our water, and provided them with alternatives/solutions to their actions.



There is significant work underway with consenting activities under the Proposed Natural Resources Plan (NRP) including a good level of engagement in the NRP process itself, ie; hearings, submissions etc. The outcomes of the collaborative work with the Whaitua Committee may impact future consent conditions. We are also actively participating in other national work streams such as the National Planning Standards – Network Utilities, and Ministry for Environment Urban Water Principles.

How we're tracking against our service goals in 2018/19:

On Track

Some concern

♦ Off track

Outcome: Resilient networks that support the economy

conomy*	We minimise the impact of flooding on people's lives and proactively plan for the impacts of climate change	Improve	•	•	•		
pport our e	We provide three water networks that are resilient to shocks and stresses	Improve	•	•	•	٥	۵
Resilient networks support our economy*	We plan to meet future growth and manage demand*	Improve	•	•	•	٥	۵
Resilient r	We provide reliable services to customers	Stay the same	6	•	•	۵	۵



Completion of our hydraulic models by 2021 will allow us to better understand the likely impact of flooding on communities. There are known flood risk areas that will need improved flood mitigations. Programmes are being developed and prioritised to understand the scale and urgency of an appropriate response. Areas of known high risk are having upgrades implemented. Examples include construction work underway for Kilbirnie and design being progressed for Porirua.



Our networks are fragile and vulnerable to a significant natural event such as an earthquake. Improvements coming out of the water supply resilience strategy have been incorporated into the councils' 30-year Infrastructure Strategies, informing and supporting the 2018-38 Long-Term Plans. The Community Infrastructure Resilience programme, which is financially supported by central government, will continue toward completion in quarter two.



The National Policy Statement (NPS) – Urban Development Capacity requires councils to support growth demands with enabling planning provisions and adequate three waters servicing. Initial results are showing a shortfall in both areas for predicted growth over the next 3-10-and 30-year periods. District Plan changes to enable growth will need to be integrated with network planning that identifies and resolves capacity issues over these same timeframes.



An increased number of reported water leaks has meant that the initial response to non-urgent repairs has been slower. Increased awareness around health and safety requirements has meant that more planning is now being carried out prior to the works on site. We have selected a new Alliance partner for network maintenance and operations which will commence in July 2019 with the intent of improving the management of customer issues.

capital delivery programme

We are halfway through the first year of our three-year capital delivery programme.

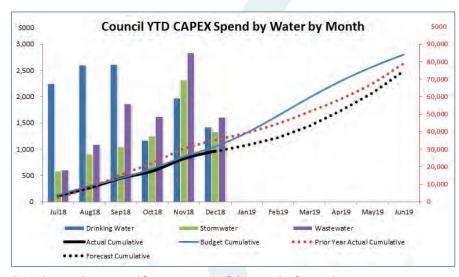
t's been a challenging start as we grapple with issues affecting the industry such as resource constraints and cost increases. Market cost increases are being driven by contractors being busy, so being less aggressive with pricing, higher wage rates, competition for staff, increased health and safety and traffic management costs. We manage our programmes within a fixed funding cap, so cost increases cause delays whilst we resolve funding. This year we have had a number of cost increases and have had to slow down while we resolve funding. We have also freed up funding in

later years by deferring projects to live within the three-year funding caps. This means we are projecting to underspend this year and we are revisiting projected costs and workloads over the remaining years of the current LTP.

This time last year we had a significant urgent piece of work underway to manage drinking water quality risk at the Waterloo Treatment Plant, which is partially why we are behind last year's expenditure. Aside from this, we are progressing along with our renewals and upgrades programmes with work expected

to ramp up over the next two quarters. Seasonality means we do a lot of our planned work in private property over the next quarter in the drier months and after the public holiday period, and work on reservoir strengthening will get underway in April as water restrictions come to an end.

Risk of further delays to funding approvals to manage cost increases mean we may see further drop off in expenditure towards the end of the year, but this will be recovered next financial year as our contractors start work on site.



Capital expenditure spend for quarter two of the 2018/19 financial year.

2018-21

Statement of Intent update

We'll be reliable in the delivery of our renewals and capital works programmes by completing planned work within timeframes (SOI measure 24).

UPDATE: For the period (1 July – 31 December) we've completed 70 per cent of planned capital work. We're tracking towards year-end at an 82 per cent completion rate for baseline projects.

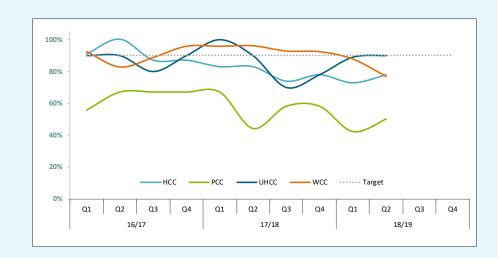
tracking our performance

Below are the results of our activities up to 31 December 2018.

Freshwater quality

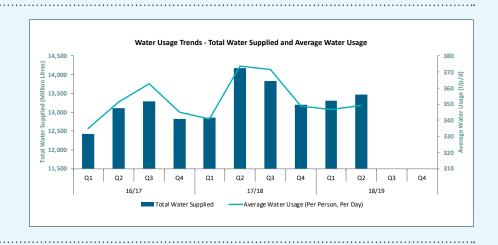
Target: 90 per cent of all freshwater sites have a rolling 12-month median < or + 1,000 colony forming units (cfu)/100ml.

We currently monitor freshwater sites and beaches. Some of these sites exceed pollution target levels. This is a long-term ongoing initiative to identify and remove sources of pollution. Test results from freshwater monitoring sites have shown a decline in water quality over the last 12 months.



Water usage trends – total water supplied and average water usage

We delivered 26.5 billion litres of safe water to over 400,000 people in the first half of the 2018/19 financial year. This is compared to 27 billion litres in the same period last year. The decrease could be contributed to a wetter, more mild summer, and our focus on finding and repairing leaks.



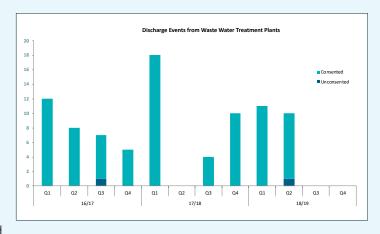
Discharge events

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Target: no non-consented overflow from treatment plants.

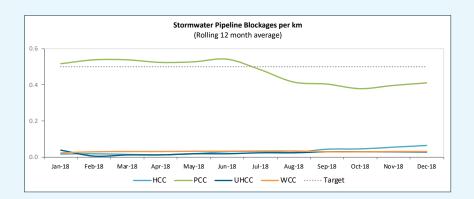
Not achieved. In October 2018 (Q2) there was a non-consented overflow at the Porirua Wastewater Treatment Plant. We've conducted an internal investigation and are awaiting the outcome of Greater Wellington Regional Council's investigation. All other consents are fully compliant.

Our wastewater and stormwater network reliability remains well within target performance levels, with the exception of Porirua City Council (PCC blockages are overstated due to the temporary unavailability of task data. Customer call data has been substituted and possibly overstates the number of actual blockages).



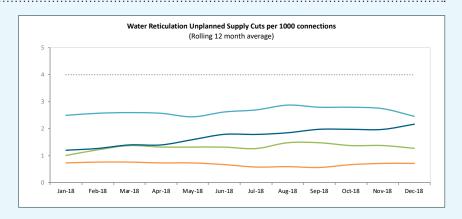
Stormwater pipeline blockages

In the last 12 months, there were 0.09 stormwater water blockages per km of pipe, or 1 for every 11km of pipe.



Water reticulation supply cuts

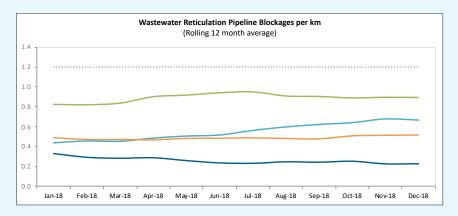
In the last 12 months there were, 1.4 unplanned supply cuts per 1000 connections. 1 for every 700.



connections.

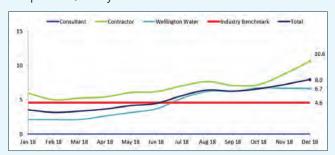
Wastewater blockages

In the last 12 months, 0.58 wastewater water blockages per km of pipe. 1 for every 1.7km of pipe.



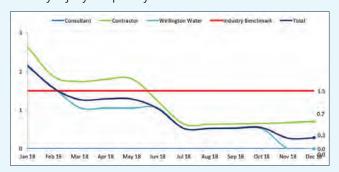
Health and safety

People first, every time. Below are the results of our health and safety injury frequency rate.



Total recordable injury frequency rate

This last quarter has seen 14 minor injuries (two LTIs lasting one day each); such as body sprains/strains and cut fingers, causing this trend to increase over the past few months. We've identified improvements we can make to keep our people safe, although a greater emphasis needs to be placed on 'fitness for work'.



Lost time injury frequency rate

This last quarter has seen two LTIs lasting one day each. They were a strained neck while lifting heavy equipment, and a foreign object entered the eye whilst welding (eye protection was in place). The injuries were minor and did not cause lasting effects. Both incidents have been addressed and we're designing interventions to reduce our lost time injury frequency rate (LTIFR).





The Wellington Plunket Fun Run Sunday 5th May at Remutaka Rail Trail

Get involved today: funrun.plunket.org.nz #plunketfunrun







RICHARD & RED'S WATER SAVING TIP: "TURN OFF YOUR TAP!"

II'S A GREAT WAY TO SAVE AND LOOK AFTER OUR WATER.







Absolutely Positively Wellington City Council





Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, and Greater Wellington Regional Council. The councils are all equal shareholders.

Our vision is to create excellence in regional water services so communities prosper. Our customers, the residents of the metropolitan Wellington region, use the services we provide: drinking water; wastewater; and stormwater in their homes, businesses, and communities every day.