LOOKING AFTER OUR FUTURE

ANNUAL REPORT 2020

Watercare
An Auckland Council Organisation

ABOUT US

Watercare Services is a lifeline utility providing water and wastewater services to 1.7 million people in Auckland. Our services are vital for life, keep people safe and help communities to flourish.

We supply reliable, high-quality drinking water to homes and businesses in the Auckland region and collect, treat and discharge their wastewater in environmentally-responsible ways.

We manage water and wastewater assets worth $11 billion and plan and build infrastructure to ensure we support growth today and into the future.

We are a council-controlled organisation, owned by Auckland Council. Our activities and programmes are funded through user charges. We are required by law to be a minimum-cost, cost-efficient service provider and we do not pay a dividend to our shareholder.

ABOUT THIS REPORT

This report presents an integrated view of Watercare's social, environmental and financial performance for the financial year ended 30 June 2020.

Following the principles of integrated reporting, the report describes how we create value through our business activities, focusing on what matters most to our many stakeholders and our business.

It covers our performance and our plans to keep creating value for Aucklanders at a time of rapid population growth, climate change and our continuing mandate to be a minimum-cost, cost-efficient service provider.

This report is also prepared in accordance with the Global Reporting Initiative (GRI) framework. The GRI is an internationally-recognised framework which encourages transparent reporting on performance and includes an established set of disclosures and performance indicators.

This year, the GRI report has been prepared in accordance with the GRI Standards 'core' option. An index of the indicators that we have reported against is included on page 119 of this report.

REPORTING SCOPE

This report covers all operations managed by Watercare. The majority of our operations and people are located in Auckland, New Zealand. We also operate an office in Hamilton, and three laboratories in Queenstown, Invercargill and Wellington.

As a minimum-cost, cost-efficient service provider solely responsible for the supply of water and treatment of wastewater for Auckland, traditional reporting criteria such as competitive advantage, sources of differentiation and market positioning are not fully applicable to Watercare.

Throughout this report, we have listed the sources of information used to compile the performance indicators and any significant assumptions or estimates applied. We have made an effort to report three years of data in order to highlight trends and changes in performance.

SECTION 1: THE LONGER-TERM PLAN

SECTION 2: DELIVERING OUR STRATEGY

SECTION 3: LEADERSHIP AND GOVERNANCE

SECTION 4: FINANCIAL REPORT

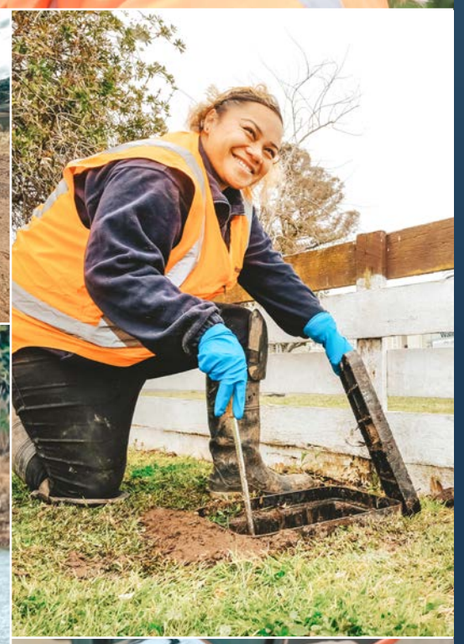
Safeguarding our precious water

Reliable, clean, fresh water sits at the very heart of modern-day living – to the point where most of us take its availability for granted. Our role as one of Auckland's water custodians is to ensure that this crucial resource is literally on tap as the city continues to grow.

This year, months and months of very little rain defied everything we had in place. Even though we plan for our infrastructure to be resilient to most droughts, the severity of this year's drought required the collective support of Aucklanders to conserve water.

Working with precious natural resources is always about finding the informed and cost-effective way forward. We have that. We've planned for that. We literally have billions of dollars of infrastructure in the pipeline.

This year has challenged us. But it has in no way dented our commitment to work together with Aucklanders to ensure we preserve the water we have today – and the region is ready for tomorrow.



SECTION 1
THE LONGER-TERM PLAN

Our value creation model

Our vision

Trusted by our communities for exceptional performance every day.

Better tomorrow than we are today.
Pai ake āpōpō atu i tēnei rā.

Our mission

Reliable, safe and efficient water and wastewater services.

INPUTS

NATURAL ENVIRONMENT
Our water sources, ecosystem health and discharge points for treated wastewater

PEOPLE AND CULTURE
The competencies, capabilities and experience of our employees

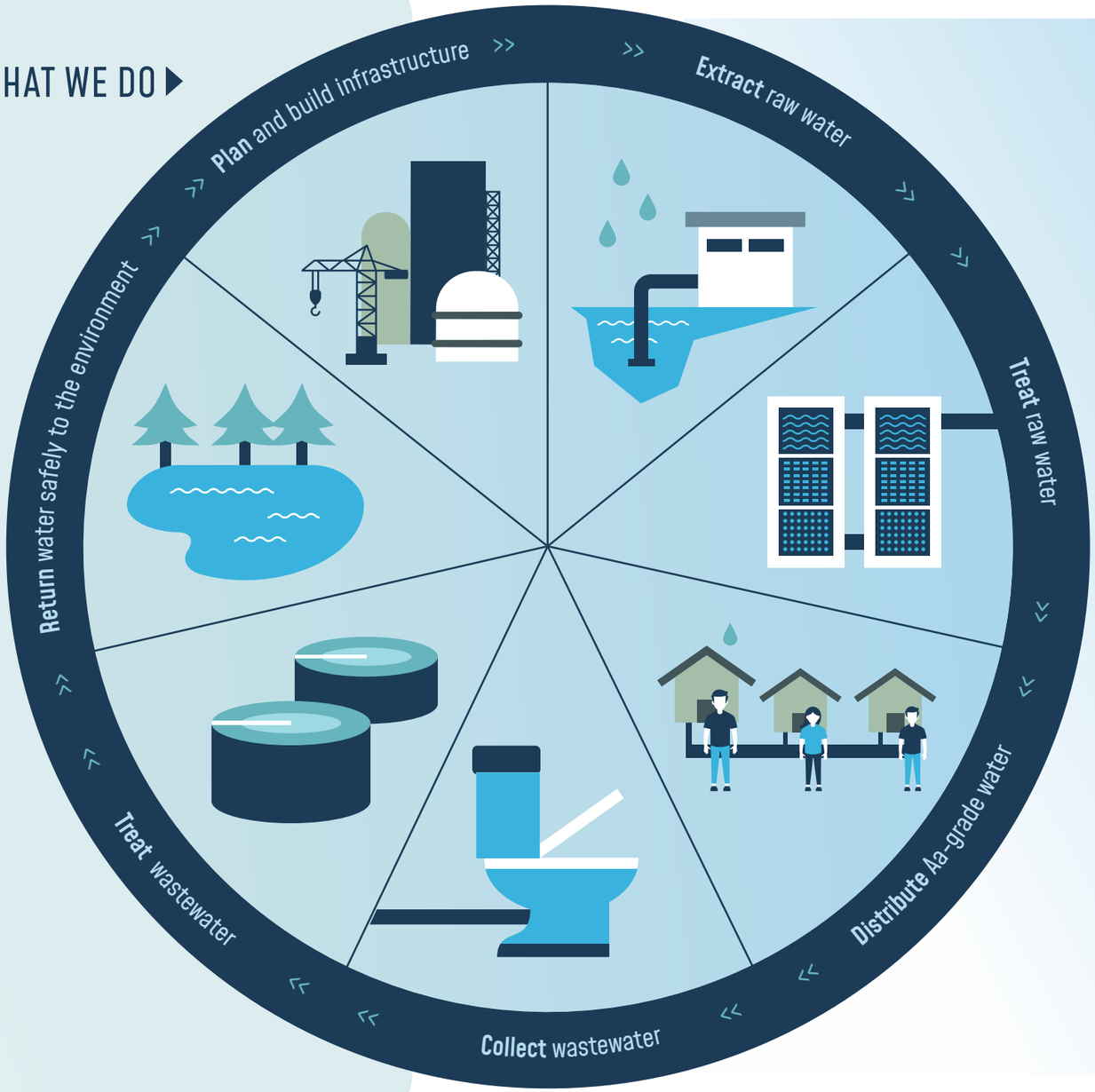
CUSTOMER AND STAKEHOLDER RELATIONSHIPS
Our relationships with customers, communities, iwi, owner, regulators, government, unions, suppliers and advisors who are essential to maintaining our social licence to operate

ASSETS AND INFRASTRUCTURE
Our dams, plants, pump stations, third-party infrastructure (e.g. roading, energy and supplies) that are critical to the delivery of our services

INTELLECTUAL CAPITAL
Our technology, processes, systems, datasets, documented practice and procedures

FINANCIAL CAPITAL AND RESOURCES
Our equity, debt, cash flow, revenue and investments

WHAT WE DO



OUTCOMES

- Protected and enhanced natural environment
- Leading-edge resource efficiency and reuse of resources including water
- Safe, engaged and empowered team
- Customer trust and value
- Industry talent and skills developed
- Public health
- Engaged communities and stakeholders
- Thriving communities and economy
- Future-proofed growth and supply assurance
- High-performing infrastructure
- Industry-leading thinking and processes
- Minimum-cost, efficient, financially-robust provider

SUPPORTED BY **ACTIVE GOVERNANCE AND RISK MANAGEMENT**

Chair of Watercare's board of directors, Margaret Devlin and chief executive Raveen Jaduram

Chair and chief executive's report

Balancing today and tomorrow

The past year has been one of unprecedented challenges for Watercare. But alongside these challenges, we have also seen the enduring dedication and resilience of our people during the COVID-19 pandemic and the ongoing drought in Auckland.

Severe drought

2019/20 was dominated by two major events – a severe and unprecedented drought caused by prolonged dry weather and significantly less rainfall than normal, and COVID-19 – the impacts of both will undoubtedly continue into the next year.

The majority of Auckland's water is sourced from our water supply lakes in the Hūnua and Waitākere ranges. As part of our water resources management, we review lake storage levels daily and rely on short and long-range weather forecasts to balance the use of our water supply sources. For most of 2019/20, the storage levels in our Hūnua and Waitākere supply lakes were significantly lower than normal due to a severe shortage of rainfall. In fact, from 1 November 2019 to 31 May 2020, Auckland experienced its worst drought on record, receiving only 60 per cent of the normal rainfall.

Based on these indicators, we activated our drought management plan in November 2019 and maximised water production from our other sources to slow down the depletion of our lake storage.

The two main aspects of our drought management plan are augmenting water supply and reducing demand.

Augmenting water supply

We started work to bring two new water sources into operation – a bore in Pukekohe and a former dam (Hays Creek) in Papakura. We are close to commissioning a new reservoir in Pukekohe that will allow us to produce and distribute more water from the Waikato. Efforts are also underway to upgrade the Onehunga Water Treatment Plant to enable it to produce more water. Together, these new sources are expected to produce an additional 40 million litres per day (MLD) by December 2020.

Using emergency powers under Section 330 of the Resource Management Act, we also abstracted additional water from the Waikato River for two weeks and treated it at the Waikato Water Treatment Plant.

When the lake storage levels fell below 50 per cent in May 2020, we worked with Auckland Council to implement stage 1 water restrictions to safeguard future water supply. These restrictions banned the use of potable water for outdoor uses, and the use of hoses to water the garden or wash vehicles.

Throughout the year, we urged Aucklanders to use water efficiently; with the pandemic, we encouraged our customers and communities to heed the Government's advice to wash hands regularly and be mindful of using water wisely. During the lockdown and subsequent downgrading of alert levels, we focused on managing our water supply as efficiently as possible to ensure security of supply and the health and well-being of our communities.

Reducing demand

Aucklanders typically use between 375 MLD and 570 MLD, depending on the time of the year. Our focus was on reducing this demand and maintaining it at a sustainable level to allow our supply lakes to recharge in time for summer 2021. To achieve this, we urged Aucklanders to use water efficiently; during the pandemic, we encouraged our customers and communities to heed the Government's advice to wash hands regularly and be mindful of using water wisely. During the lockdown and subsequent downgrading of alert levels, we focused on managing our water supply as efficiently as possible to ensure security of supply and the health and well-being of our communities.

We also called for voluntary savings from both residential and commercial customers, and extensively promoted water-efficiency resources in the community. Our messaging focused on the power of collective action: if each of us saves a little, together we can save a lot.

It was a tough decision to announce water-use restrictions that could adversely impact businesses like water blasting and building wash companies, especially on the back of COVID-19. But we have had to balance the availability of a finite resource – high quality drinking water for 1.7 million Aucklanders – versus the use of this resource for non-potable activities.

We have worked closely with Auckland Council to provide free access to seven non-potable water sources across Auckland, including springs and lakes, so these businesses have an alternative means of supply and can continue their operations. We would like to acknowledge the support of Auckland Council as we continue to address the challenges from the current drought.

Aucklanders have made significant reductions to overall demand, saving two billion litres of water by the end of June 2020.

Improving network performance

We also heightened our focus on improving the performance of our networks, particularly leaks. Leaks are inevitable for all water networks around the world. Though Auckland's network is one of the top performers in New Zealand in terms of the degree of real water loss, we know there is room for improvement and we are committed to reducing the volumes of water lost. We implemented a proactive programme of leak detection which has already reduced the volume of water losses by an estimated 2.35 MLD.

Investing in infrastructure

The drought has thrown light on another important aspect of being a water utility – planning and investing in infrastructure for today and tomorrow.

Since the amalgamation of the councils in 2010, Watercare has invested $2.7 billion to build water and wastewater assets and $1.8 billion to maintain these assets. As New Zealand's largest water utility with an asset base worth $11.0 billion, our scale has enabled us to make significant investments in improving and transforming water networks and water quality across Auckland.

In 2019/20, we invested $164 million towards building water supply infrastructure and another $388 million on infrastructure for wastewater.

We have always planned for the future and we will continue to do so. Our Asset Management Plan has a horizon of twenty years, and includes investment of another $4.8 billion on water and wastewater projects over the next eight years, with a further $5.2 billion in the following 10 years.

We fund our infrastructure through a combination of user charges and borrowings so we have a responsibility to invest enough to

maintain and improve service levels while ensuring that the infrastructure we build is optimally used. We also have a responsibility to deliver our services at minimum cost for customers and ensure a stable price path for our services. An ongoing challenge for us is the impact that Watercare's borrowings have on Auckland Council Group's debt levels. While we receive no money from local or central government, we borrow through Auckland Council, impacting on their credit rating.

For all the investments we have made since 2010, our debt-to-equity ratio is low and backed by a strong balance sheet. So our focus over the next year will be to work with Auckland Council and explore options for independent financing.

Responding to COVID-19

Access to clean drinking water and sanitation services are particularly important during a pandemic and thanks to robust planning and risk management, we were able to remain operational and continue serving Aucklanders during the lockdown in March and April. (Read the case study on page 26.)

Recognising successes

It is true that most of our resources and time in 2019/20 have been dedicated to responding to the drought but there have some significant achievements as well.

In September 2019, we signed a $2.4 billion construction partnership with Fulton Hogan and Fletcher Construction for the delivery of water and wastewater infrastructure for Auckland over the next 10 years.

The long-term and collaborative nature of the contract is a first for New Zealand. This bold initiative addresses many of the challenges faced by the construction industry, while also achieving our ambitious sustainability, cost-efficiency and safety targets. (For a progress update on this programme, read the case study on page 44.)

We also progressed work on schedule for the $1.2 billion, 14.7km-long, 4.5m-wide Central Interceptor Wastewater Tunnel project. In August 2019, we began to prepare the sites at Māngere and May Road, Mt Roskill.

Work on these sites included the creation of access roads, site fencing, delivery of key machinery and building platforms for the drop shafts. In 2020, we started construction at seven more sites to build the drop shafts that will eventually connect to the main tunnel.

Our tunnel-boring machine is scheduled to arrive at the end of 2020 and will begin tunnelling from Māngere in early 2021.

The commissioning of the completed Central Interceptor is estimated to happen in 2025. Together, the Central Interceptor and the Western Isthmus Water Quality Improvement Programme will reduce overflows in the area by up to 80%.

At the start of the financial year 2020, we signed a contract with Waikato District Council to manage their water, wastewater and stormwater assets. This service contract has the potential to run for 28 years and has a strong focus on better environmental outcomes and improved water services for our southern neighbours.

We also became the majority shareholder of Wellington-based software and process engineering company Lutra Limited in January 2020. Lutra has a small and highly skilled team of industry experts providing software and technical services to improve the performance of people and processes involved in water and wastewater operations.

With this acquisition, we will be able to gain efficiencies by implementing Lutra's software at our sites and using their training platform for our staff and contractors.

Building capability

Issues such as climate change, ageing populations and ageing infrastructure present complex challenges for the water industry; therefore, our focus is on building the capability of our people and unlocking their potential to be future leaders.

During the year, our people participated in external leadership programmes such as Smart Seeds and Rotary Youth Leadership Awards and learnt how to work collaboratively to solve complex problems.

We also launched in-house leadership programmes, through both our online learning platform and a face-to face version called Future Stars, to provide more opportunities for leadership training to teams across the business.

It has been encouraging to witness the resilience demonstrated across Watercare, at both an individual level and an organisational level, in the face of ongoing challenges.

With the upcoming water industry reforms, our focus for 2020/21 will be to prepare Watercare for a new regulatory environment. Coming to grips with new environmental and water quality compliance frameworks may be a challenge but it is also an opportunity to forge a new path for Watercare as an international role model in efficiency, customer service and environmental stewardship.

We are incredibly grateful to our people for enabling us to continue operating as a business and provide essential water and sanitation services to the community during the pandemic.

In addition, we would like to acknowledge our Board of Directors for their direction and counsel during the year.

As chair of Watercare's board of directors, I would also like to acknowledge outgoing chief executive Raveen Jaduram's contribution to Watercare's journey over the last six years and wish him well for his future endeavours.

While the past year has been a challenging one, it has also presented many opportunities and learnings for our business and reaffirmed our commitment to be better tomorrow than we are today – Pai ake āpōpō atu i tēnei rā.

A snapshot of 2019/2020

HIGHS

303,000 TREES PLANTED
in the Hūnua Ranges

25 ELECTRIC VEHICLES
added to corporate fleet replacing conventional fuel cars

0.87%
of monthly income was spent on water bills by an average Auckland household

SAFE AND RELIABLE
water and sanitation services especially during the COVID-19 pandemic and nationwide lockdown

UNCONSCIOUS BIAS TRAINING
introduced for managers and people leaders

ZERO COVID-19 CASES
at Watercare or the extended Watercare family due to proactive risk management

2/3 STAFF MEMBERS
equipped to work from home, ensuring service continuity for Aucklanders

Launched new incident reporting tool
iCARE
for health, safety and wellbeing

ENTERPRISE MODEL PARTNERSHIP
signed to deliver better infrastructure for Auckland

$552M
investment in water and wastewater infrastructure for Auckland

Became a
MAJORITY SHAREHOLDER
of processing software company Lutra

LOWS

36% LESS RAINFALL
in catchments between November 2019 and June 2020

Volume of real water loss
13.2%
against a target of 13% or below

STAGE 1 WATER RESTRICTIONS
banning the use of drinking water for outdoor water uses to reduce demand

Operating expenses
$40.2M
higher than budgeted due to unplanned maintenance

10.6
Lost-time Injury Frequency Rate (LTIFR) per million hours worked (20 actual injuries)

SECTION 2
DELIVERING OUR STRATEGY

Lower Nihotupu Dam, May 2020

Natural environment

Value created:
Protected and enhanced natural environment, leading-edge resource efficiency and reuse of resources including water

It is a simple and universally-acknowledged truth that water is precious. It is also equally true that water, as both a resource and a service, is often taken for granted. This contrast came to the fore over the past year.

As a water and wastewater services provider for 1.7 million Aucklanders, our work is extremely dependent on the natural environment and, at the same time, has an enormous impact on it.

Extreme weather influenced our operations significantly during 2019/20. We began the year with prolonged dry weather and water storage levels lower than normal. While delayed rainfall in spring 2019 increased the storage levels over September and October, the dry weather resumed in November.

Since then, Auckland has been in a severe drought, with our water storage lakes receiving almost 40% less rainfall between November 2019 and May 2020. These storage lakes typically supply two-thirds of Auckland's water demand so the rainfall deficit is very critical to the region.

In 2019/20 we also observed an overall increase in demand for our water, especially record-breaking daily consumption during February due to hot and dry conditions.

Our efforts throughout the year have been focused on ensuring security of supply to our customers and the wider community. We introduced new tanker filling stations to help those on tank supply over summer. We maximised water production from sources that are independent from our supply lakes, such as the Waikato River and the Onehunga aquifer. We did this to preserve the water in our supply lakes and enable them to recharge. We also focused on augmenting our water supply with an investment of $224 million and managing demand.

In May 2020, when the water storage levels in the lakes fell below 50% for the first time in 25 years, we recommended the implementation of Stage 1 Water restrictions as part of the Auckland Metropolitan Drought Management Plan in conjunction with Auckland Council.

36% less rainfall than normal between November 2019 and May 2020

Augmenting water supply

Apart from upgrading and maximising production at Waikato and Onehunga water treatment plants, we are also working to return two former water sources – Hays Creek Dam in Papakura and a bore in Pukekohe – which will provide an additional capacity of 40 MLD by December 2020. Planning, consenting and construction on these four projects are progressing at pace. These projects will not only provide additional water next summer, but they will also help to speed up the recovery in storage levels for next winter.

Auckland has been in a severe drought, with our water storage lakes receiving almost 40% less rainfall between November 2019 and May 2020.

We have invested significant resources towards reducing the amount of water lost through leaks and breaks in our water pipes. Annually, about 13% of the total water we produce is lost through leaks. While leaks are unavoidable for all water networks around the world, we know there is more we can do to reduce this volume. We therefore have a programme of works completed and underway that includes proactive leak detection across our 9000 kilometres of water network, prioritised management of leaks and pipe renewals.

Demand management

In line with the Drought Management Plan, throughout the year, we urged Aucklanders to be water-efficient and make voluntary savings. When the lake levels dropped critically in May, Auckland Council imposed stage 1 water restrictions which prohibited the use of outdoor water hoses and water blasters for residential water users; Auckland Council, commercial and other non-domestic water users cannot use potable water to operate a car wash, water sports fields, plants or paddocks.

We did not recommend these restrictions lightly. We understood they would have a bigger impact on commercial water users than on residential water users and we knew it came at a very difficult time for businesses, given the challenges of COVID-19. However, permitting drinking water to be used for outdoor and non-potable uses when the region continues to experience the worst drought on record is not sustainable.

We are working with Auckland Council to support impacted businesses by providing millions of litres of non-potable water from various sites across Auckland. Proving that necessity is the mother of invention, a number of Auckland businesses have overcome the impact of these restrictions by accessing water from these and other private bores and reusing water in their processes and operations.

Our own Central Interceptor Wastewater Tunnel project has been using non-potable water at all of its construction sites. The project will be using recycled wastewater from the Māngere Wastewater Treatment Plant to clean and operate a tunnel-boring machine.

These are encouraging shifts in thinking and behaviour that recognise the value of water, especially high-quality drinking water that Aucklanders have reliably enjoyed, without any restrictions, over the past 25 years.

While the drought dominated our work and resource allocation during the year, we made significant progress in some of our ongoing projects: we planted another 303,000 seedlings in the Hūnua Ranges, as part of our progressive regeneration of a former pine forest with native trees and plants over the next 30 years.

We partnered with Vector PowerSmart to install New Zealand's first-ever floating solar array on the oxidation pond at our Rosedale Wastewater Treatment Plant. This floating array is made up of 2700 solar panels and 3000 floating pontoons and the installation is expected to be complete in September 2020. It is the largest solar project in the country and will generate enough energy to power 200 homes for a year. It will increase the energy self-sufficiency of the Rosedale plant and is part of our energy efficiency and neutrality programme.

We also expanded our fleet of electric vehicles from five to 30 during the year, effectively removing 45 tonnes of carbon dioxide from the environment.

All of these initiatives are part of our ongoing organisational commitment to reduce the impacts from climate change.

Leak detection programme prevents millions of litres of water loss

Watercare's proactive leak detection programme has prevented millions of litres of water loss at a crucial time for Auckland's water supply.

The programme – which finds invisible leaks by listening for distinctive leak sounds – was accelerated this year as the region suffered the worst drought on record.

The programme has focused on areas in Auckland with the most reported leaks, including Mt Wellington, Ellerslie, New Lynn, Māngere, Ponsonby and Herne Bay, and covered more than 1140 kilometres of pipes.

Acoustic leak detection involves listening for signs of a leak by tapping a stick microphone to a meter or pipe connection. Leaks have a distinctive sound as they are constantly running. The checks are repeated at different times of the day to confirm it is a leak. The volume of the leak is estimated based on the sound detected.

From the work completed so far, an estimated water loss of more than two million litres a day (MLD) has been prevented.

Acoustic leak detection work is just one element of a wider programme to minimise water lost to leaks.

We spend more than $20 million a year replacing ageing water pipes and their supporting infrastructure and we are looking at increasing investment on renewals. We have also put more crews in the field so we can investigate and fix reported leaks as soon as possible. We aim to repair urgent leaks within a few hours, and all leaks within five days, but sometimes, due to the location of the leak and factors like traffic management, they do take longer.

While every effort is being made to reduce leakage in Auckland, leaks are expected in all water networks around the world. They can be caused by many factors: hot, dry weather and ground retraction; vibrations including heavy traffic; and damage caused by a third party working in the ground.

Auckland actually has one of the better leakage rates in New Zealand. However, we know there's room for improvement so, by July next year, we expect to have proactively checked more than 6000 kilometres – almost two-thirds – of Auckland's water pipes.

More than

2 MILLION

litres of water a day has been prevented from leaking

Water supply

	2019/20	2018/19	2017/18
Water supply dams (number of operational sources over the year)	12*	12*	12*
River sources (number of operational sources over the year)	2	3	3
Groundwater sources (number of operational sources over the year)	13	13	12
'A'-grade water treatment plants	15	15	15
Other water treatment plants	1**	1**	Nil
Length of treated watermains (km)	9,429	9,349	9,187
Service reservoirs	87	85	85
Pump stations	95	94	93
Annual volume produced (ex plant m^3)	166,073,744	159,557,593	153,784,185
Annual volume sold (m^3)***	132,321,049	128,610,171	127,548,898

* Though Watercare maintains Hays Creek, it was out of service in 2019/20. It will be back in service next year and is part of our drought supply augmentation.

** Warkworth Wells Water Treatment Plant was commissioned in December 2018 and has not been submitted for grading.

*** The difference between volume produced and volume sold is due to non-revenue water.

Volume of water by source

	2019/20		2018/19		2017/18	
	Volume (m^3)	%	Volume (m^3)	%	Volume (m^3)	%
Waitākere Dam	2,700,520	2%	3,517,824	2%	3,839,835	3%
Upper Huia Dam	4,772,363	3%	4,684,808	3%	8,102,899	5%
Upper Nihotupu Dam	6,141,941	4%	5,299,609	3%	8,272,721	5%
Lower Huia Dam	12,116,995	7%	10,182,607	6%	6,611,783	4%
Lower Nihotupu Dam	9,503,293	6%	6,035,042	4%	1,329,914	1%
Cosseys Dam	14,291,634	8%	16,665,256	10%	12,388,820	8%
Upper Mangatawhiri Dam	21,188,152	13%	24,687,408	16%	29,291,746	19%
Wairoa Dam	9,139,533	5%	12,722,452	8%	12,265,389	8%
Mangatangi Dam	26,466,287	16%	41,817,529	26%	45,572,241	29%
Waikato River	50,812,241	30%	26,460,059	17%	20,210,713	13%
Onehunga Aquifer	6,848,096	4%	5,147,992	3%	4,326,071	3%
Rural North	1,926,223	1%	1,727,329	1%	1,539,685	1%
Rural South	977,901	1%	928,023	1%	942,431	1%
Total	**166,885,179**		**159,875,938**		**154,694,248**	

Conservation activities

Watercare's activities involve interaction with diverse flora and fauna. We work hard to minimise the impact of our activities and, where possible, to enhance the environment. We allocate significant resources to minimising the effects our dams have on the surrounding freshwater ecologies. This includes simulating flood flows downstream from the dams and implementing a trap-and-haul programme at native fisheries, where migrating fish and eels are transferred around the dams.

Name of site	Ecological attributes	Conservation activities carried out in 2019/20
Southern regional wastewater plants	Habitat	Continued vegetation and noxious/pest weed control on Watercare-owned land – Pukekohe, Waiuku, Clarks Beach, Kawakawa Bay, Beachlands and Owhanake (Waiheke) wastewater treatment plants.
Southern regional wastewater plants	Habitat	Continued pest control (rabbits, possums, rats) at all southern sites.
Hūnua Ranges and Waitākere Ranges Fish Trap-and-Haul Programme	Native bush	Trap-and-Haul programme for the upstream migration of native juvenile eels and whitebait species and downstream migration of adult migrating eels. All trap-and-haul programmes are operated during the respective migrating season. Trap-and-haul at Mangatangi weir continued for the transfer of native torrent fish.
Northern regional wastewater plants	Native bush and wildlife habitat	Continued vegetation and noxious/pest weed control on Watercare-owned land – Army Bay, Waimauku, Helensville, Omaha, Snells/Algies, Waiwera, Warkworth and Wellsford wastewater treatment plants.
Northern regional wastewater plants	Native vegetation	We continue to actively undertake pest control (vermin) at all the northern regional wastewater treatment facilities.
Omaha Wastewater Treatment Plant	Habitat	The Omaha Wastewater Treatment Plant grounds; there is approximately 10 hectares of native plantings that are irrigated by treated wastewater.
Omaha Wastewater Treatment Plant – treated wastewater storage pond	Native vegetation	Pāteke (Brown Teal), native to New Zealand, continue to seasonally swim in the storage pond. These are the rarest waterfowl on the mainland and hence are an important attribute to the area.
Māngere Wastewater Treatment Plant	Habitat for fauna	We have continued to undertake extensive vegetation management and noxious weed removal on Watercare land.
Bird roosts	Foreshore of Manukau Harbour, internationally-renowned for migratory birds	Access bridge built to enable better access and protect waterway. The artificial bird roosts' reconstruction has remained stable with minimal erosion over the past year. The Manukau Harbour and the bird roosts have continued to support more than 20% of New Zealand's total wading bird population with many migratory species including Eastern Bar-tailed Godwits, Wrybills and Southern Pied Oystercatchers.
Coastal walkways	Habitat for fauna	For the Coastal Clean-Up 2020, Watercare employees successfully removed over 10,000 litres of rubbish from the Watercare foreshore coastline.
Foreshore and coastal walkways	Foreshore of Manukau Harbour, internationally-renowned for migratory birds	Planting of 3000 seedlings across foreshore area. Continued co-ordinated pest control activities with Auckland Council's Ambury Regional Park as a defence against invasive pests. The efforts included bait lines and alternate bait pulses, DOC200 traps, live traps, Pindone drops and shooting to reduce the number of pests impacting the bird roost and the Watercare Coastal Walkway. The ongoing support from volunteers for the trap lines and the general public in reporting changes on the foreshore have helped make the foreshore a better place.
Hūnua Ranges revegetation	Native bush	Planting of 303,000 native trees, replacing land previously under pine forestry. Part of an ongoing restoration project, with more plantings forecast for 2020/21.
Waikato RiverCare	Riparian restoration	Riparian planting projects along the lower Waikato River to enhance river water quality.
Central Interceptor Project	Riparian restoration	More than 2000 native seedlings planted on the banks of a tributary of the Waitītiki-Meola Creek on Mt Albert Grammar School land.
Bombay Water Treatment Plant	Riparian restoration	Riparian planting along 800 metres of stream bank. 5320 trees planted in January 2020.

Dams and other operational areas within Waitākere Ranges are covered by the Waitākere Ranges Area Heritage Act. The Auckland Unitary Plan also designates parts of our land as Significant Ecological areas. Some of our sites also have 'heritage protection status' e.g. Nihotupu Filter Station.

Climate change

During 2019/20, our focus was on embedding the impacts of a changing climate into our thinking and processes, following the launch of our Climate Change Strategy in early 2019.The strategy covers specific actions that we will take immediately and establishes a pathway of monitoring and understanding between now and 2025 so that we can adapt to the changing climate based on evolving data and projections.

The strategy establishes two ambitious targets for emissions reductions from our operations which align with keeping the global temperature increase within 1.5 degrees Celsius.

- Net Zero emissions by 2050
- Reduce operational greenhouse gas emissions by 45% by the year 2030.

It also comprises a work plan that consists of 14 portfolios across both adaptation and mitigation.

Work progressed during the year includes:

- A new subcommittee of Watercare's board – Committee for Climate Action – was established in 2020 and the business has contributed to Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan
- Milestones on several climate portfolios such as the following:

Climate modelling and water source

The business case for the Integrated Source Management Model (ISMM) phase 1 upgrades has been approved. This will provide a more robust understanding of recent rainfall patterns. Once established, this will lead to preparation of phase 2, which covers future projections with climate scenarios included. The tool can be used to identify and manage the water sources used to supply Auckland every day.

Treatment and network resilience

The assets value stream has progressed well over the past six months with teams established and priority work plans started. These are truly cross-functional teams that are utilising existing projects and scenarios. The priority areas in this value stream are sea level rise, odour and corrosion, materials and design standards, and wastewater network overflow modelling.

Low-carbon infrastructure

The Enterprise Model's Programme First office has been established at Watercare. This includes construction partners Fulton Hogan and Fletchers as well as a representative from our design consultants. This team is developing processes while also working live on a number of 'transition' projects where they are trialling carbon-reduction opportunities. An 'Infrastructure Carbon Baseline' has also been finalised which predicts the anticipated carbon associated with our construction projects; we believe this is a first in Australasia.

Greenhouse gas emissions

We are continuing to improve and evolve our measurement and management of greenhouse gas emissions. This journey started in the early 2000's as we significantly upgraded the Māngere Wastewater Treatment Plant. This has enabled us to capture the methane and nitrous oxide emissions from the sewage and has unlocked the generation of biogas which is now turned into electricity to help run the plant. Replacing the open-air oxidation ponds and sludge lagoons with land-based treatment resulted in a long-term decrease in greenhouse gas emissions by approximately 80% compared to the 1990 baseline (on page 20 and aligned with Auckland Council's approach in the Low Carbon Action Plan).

In 2013/14 we established an improved reporting framework which included a number of external emissions that should also be accounted for under our footprint (scope 3 emission sources). In 2019/20 we have continued the evolution of our approach, updating emissions factors and methodologies to align with recent updates, and improving data capture.

This year our overall emissions (scope 1, 2 and 3) have increased by 22% in comparison with the previous year. The main reasons for this increase are a rise in electricity consumption and new reporting sources that we have included within our scope. Details are provided below.

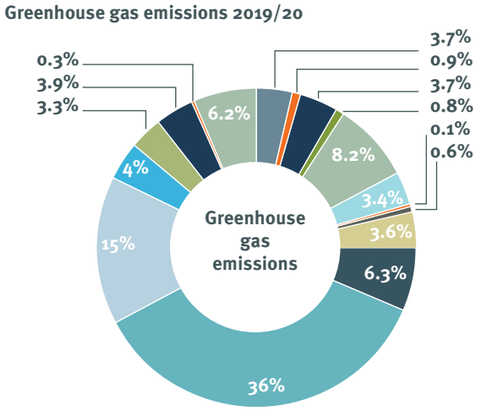
Emission movements over the past year

Scope 1 emissions decreased by six percent, primarily due to the reduction in natural gas consumption at Māngere Wastewater Treatment Plant compared with 2018/19, coupled with changes in emission factors for the reporting year.

Our scope 2 emissions increased by 21% compared with the previous year. This is wholly attributed to the electricity consumption associated with the increased pumping activity from the Waikato Water Treatment Plant undertaken in response to the drought conditions in Auckland. The low water storage levels in the Hūnua and Waitākere dams have resulted in a significant increase to the volume of water sourced from the Waikato River. This source requires about 25x more energy per unit of production, due to pumping uphill from the Waikato River to Auckland city.

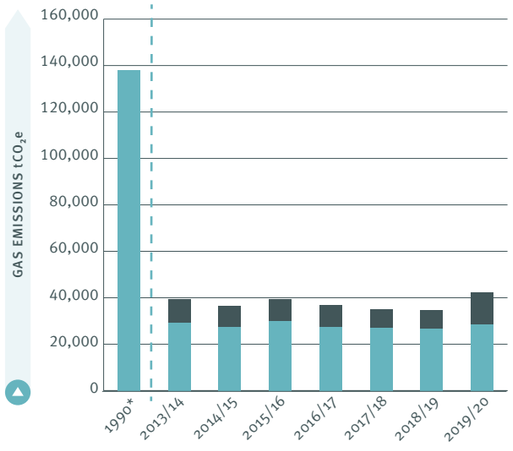
The boundary of our scope 3 reporting has expanded this year to include emissions from the newly-established operations and maintenance contract for the management of the three water services for Waikato District Council (which began on 1 October, 2019). For the first time we are reporting fuel use by our external maintenance contractors as well.

Greenhouse gas emissions 2019/20



- Natural gas use 3.7%
- Biogas combustion 0.9%
- Fuel use in corporate vehicles 3.7%
- On-site fuel use 0.8%
- Wastewater treatment 8.2%
- Effluent discharge to water and land 3.4%
- Refrigerants 0.1%
- Overflows from network 0.6%
- Fugitive emissions from network 3.6%
- Biosolids in land rehabilitation 6.3%
- Electricity use 36.0%
- Lime use (treatment processes) 15.0%
- Maintenance contractor fuel use 4.0%
- Transmission and distribution loss natural gas and electricity 3.3%
- Waste generation and transport to landfill 3.9%
- Business travel 0.3%
- Waikato District Council operation and maintenance contract 6.2%

Performance against baseline (1990 onwards)



* As a result of lack of exact data breakdown for scope 1 and 2, we are reporting this as a combined figure for 1990.
See details on page 19

Scope 1 and 2 Scope 3

Scope 1 – Direct emissions e.g Fuel burnt, treatment processes
Scope 2 – Electricity purchased
Scope 3 – Indirect emissions e.g Fuel use by contractors

Focus for 2020/21

There are a number of external influences that will have an impact on our greenhouse gas emissions measurement and performance in the year to come.

We will review our emissions reduction target to align with the Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan which targets 50% reduction in emissions by 2030. We will also review recent changes to the measurement methodology for wastewater process emissions published by the Intergovernmental Panel on Climate Change (IPCC). The changes in methodology may result in an increased quantity of nitrous oxide and methane gases reported; these have a high global warming potential and therefore emissions impact. These emissions account for approximately 25% of our total emissions and we will work with WaterNZ and other local utilities to understand the implications in New Zealand.

We will be reporting a full year of emissions relating to the three waters contract with Waikato District Council which started in October 2019.

Finally, our reporting boundary for emissions may change significantly with any structural changes that are proposed through the *Water Services Bill* (water industry reform) due to be enacted in 2021.

Note 1: Watercare's carbon footprint has been calculated in accordance with the "Greenhouse Gas Protocol" (WRI, 2004), including all six Kyoto Greenhouse gases and the operational control method. Per protocol, it excludes biogenic CO_2 emissions from the burning of biogas which totalled 60,628. AR5 Global Warming Potential values with climate-carbon feedbacks of 34 for CH_4 and 298 for N_2O have been used.

Note 2: Independent verification of GHG measurement provided by Toitu Envirocare in line with ISO 14064-1:2006. Emissions from Puketutu Island were excluded on the basis of sufficient data not being available to calculate the emissions.

Note 3: Emissions factors are sourced from Ministry for the Environment 2015, 2019 and IPCC 2006. Wastewater emissions include additional industry calculations.

Note 4: Additional breakdown can be found in the energy and greenhouse gas emissions supplement to the annual report 2020.

Energy use and internal generation

Watercare co-generates electricity from biogas at both the Māngere and Rosedale wastewater treatment plants. As well as the financial and environmental benefits, co-generation also improves operational flexibility and resilience. Our water supply arm is an electricity supplier too, with turbines located in the four Hūnua dams generating hydroelectric power.

This year, we used 198,864MWh of electricity, an increase of 12.7% compared with 2018/19.

We generated 22.37% of our total energy use internally, compared with 26.7% last year. Cogeneration at Rosedale Wastewater Treatment Plant was lower than 2018/19 due to one of the co-generation engines being out of service. Cogeneration at Māngere Wastewater Treatment Plant was also lower than 2018/19 due to reduced engine uptime and maintenance issues.

We have had significantly less rainfall this year and supply lakes' storage was low for most of the year as well. To meet demand, we pumped more water from the Waikato River, which consumes more energy than gravity-fed supply from our lakes.

The energy neutrality programme is underway to be achieved at Māngere and Rosedale treatment plants by 2025 (and should result in an energy reduction of about 37GWh). An investigation into control improvements at the Waikato Water Treatment Plant's raw water pumps was completed but not yet implemented due to COVID-19 and drought. An investigation into the Māngere ultraviolet (UV) treatment system is currently underway to quantify savings from the UV upgrade and identify additional potential for savings.

Total energy consumption

	2019/20			
	Total	Unit	Total GJ	%
Grid electricity purchased	153,307.11	MWh	551,905.58	
Electricity – self generation renewable (solar, hydro, biogas)	41,903.92	MWh	150,854.12	
Electricity – self generation non-renewable (natural gas, diesel)	3,652.49	MWh	13,148.95	
Transport – petrol, premium, diesel	713,348.71	litres	27,047.50	
Transport – BOC Gas	870.00	kg	42.63	
Other – Natural gas	1,574.00	GJ	1,574.00	
Total			744,572.38	
Renewable sources			606,176.23	81%
Non-renewable sources			138,396.55	19%

Internal Generation	2019/20		2018/19		2017/18	
	MWh	%	MWh	%	MWh	%
Electricity generated through water supply (hydro)	2,665	1.34%	1,413	0.79%	36	0.02%
Electricity generated through wastewater treatment (biogas) – Māngere	35,108	17.65%	39,298	21.88%	38,118	22.91%
Electricity generated through wastewater treatment (biogas) – Rosedale	6,309	3.17%	7,196	4.01%	6,050	3.64%
Electricity generated from solar	402	0.20%	84	0.05%	–	–
Electricity generated from non-renewable sources	3,652	1.84%	4,834	2.69%		
Total internally sourced electricity	44,484	22.37%	47,990	26.71%	44,204	26.57%
Total purchased electricity	153,307	77.09%	128,441	71.50%	122,172	73.43%
Electricity exported to the grid (solar, hydro, biogas)	-2,580	-1.30%	-1,626	-0.91%		
Total electricity consumed	198,864	100.00%	179,639	100.00%	166,376	

Reusing waste from treatment processes

We aim to reuse as much material as possible from our water and wastewater treatment plants. Watercare uses biosolids from the Māngere Wastewater Treatment Plant to rehabilitate Puketutu Island, which was formerly a quarry. We also maintain dedicated placement sites for solids removed during the water treatment process. In 2019/20, Watercare was able to reuse 57% of the solids from our water treatment process and 81% of the solids from our wastewater treatment process.

Operational waste from:	2019/20	2018/19	2017/18
Water treatment (m^3) – sludge	12,316	12,472	12,494
Wastewater treatment (t) – biosolids, grits and screenings	142,030	137,976	138,885

Metal content in biosolids at wastewater treatment plants

Biosolids from wastewater treatment plants can have a high metal content, due to stormwater run-off from the streets entering combined sewers and through waste from industrial users. The table below displays the metal content of biosolids from the Māngere and Rosedale treatment plants, which produce most of Watercare's biosolids.

The metal content has increased slightly this year, to 2.43 tonnes from last year's 2.36 tonnes but is well within the permitted levels specified in the Guidelines for the Beneficial use of Organic Materials on productive land – December 2017.

	2019/20		2018/19		2017/18	
Substance	Concentration (mg/kg)	Disposed weight (tonnes)	Concentration (mg/kg)	Disposed weight (tonnes)	Concentration (mg/kg)	Disposed weight (tonnes)
Arsenic	5.40	0.19	5.09	0.18	5.20	0.19
Cadmium	0.70	0.03	0.73	0.03	0.81	0.03
Chromium	47.00	1.59	43.35	1.55	41.19	1.49
Lead	16.00	0.60	16.24	0.58	18.52	0.67
Mercury	0.50	0.02	0.48	0.02	0.56	0.02
TOTAL	69.60	2.43	65.90	2.36	66.28	2.39

Resource consents

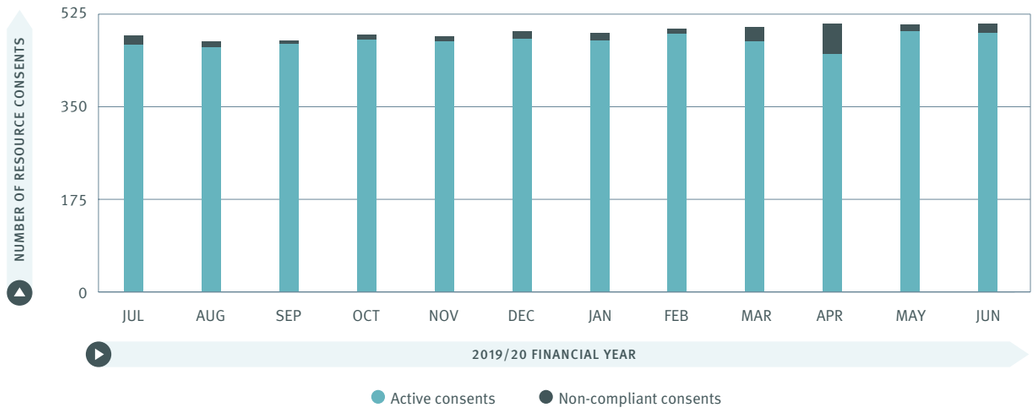
As at 30 June 2020, Watercare had 507 active consents across our network and treatment facilities, and we averaged 492 active consents over 2019/20. Our average rate of compliance with these consent conditions was 96.6%.

The increase in consent conditions with non-compliance during March and April were due to COVID-19: sampling activities that were deemed non-essential were temporarily put on hold and considered "technical breaches". These were all reported and did not incur any fines or enforcement actions.

We report all non-compliances to Auckland Council, and the council took no formal enforcement actions.

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Total number of active consents	484	474	475	485	482	493	489	497	501	506	506	507
Number of non-compliant consents 1	17	12	7	8	8	14	14	9	27	56	14	17
Number of non-compliant category 3 conditions	–	–	1	–	–	–	–	1	–	–	–	–
Number of non-compliant category 1 or 2 conditions	11	13	14	18	14	15	17	16	12	15	20	18

Resource consent conditions



Upper Nihotuput Dam, May 2020

People and culture

Value created:
Safe, engaged and empowered team, customer trust and value, Industry talent and skills developed

At Watercare, we define ourselves as a lifeline utility providing essential services around the clock. This was emphatically proven again over the past year.

When the COVID-19 pandemic hit New Zealand, our main objectives as a company were to ensure the health and well-being of our people and continue providing services to 1.7 million Aucklanders.

While the country went into lockdown for more than six weeks and most other businesses remained closed, our people worked day and night to ensure that the two most essential services during a pandemic – access to safe and reliable water supply and sanitation – continued unhindered. We did this by proactively developing and implementing a COVID-19 response plan to manage our people's health and wellness, provide them with access to critical supplies, reduce their risk and enable remote-working. As a result, there were no confirmed cases of COVID-19 at Watercare or among the extended family networks, even during peak community transmission. (Read the case study on page 26.)

With the pandemic being a test of our resilience, the ongoing drought continues to be another one. It has been heartening to see our people come together time and again to weather crises and leave no stones unturned in responding to these situations. It is a welcome evolution of our organisation from one that is based on power and structure to one empowered by people, knowledge and collaboration.

Our most recent eNPS score (a metric used to measure employee satisfaction) has increased 70%, from +21 to +36. In general, our people would recommend Watercare as a great place to work for the work environment and culture, and because the work itself is interesting. Areas highlighted for improvement include more collaboration and alignment between business functions and more transparency around remuneration and how our pay structure compares to the market.

70% increase in employee satisfaction

The feedback from the recent eNPS also highlighted the progress made in diversity and inclusiveness: 84% of the respondents said they would be comfortable speaking about their background, identity and cultural experiences and 66% said they see leadership support for diversity and inclusion at Watercare. We also improved gender and ethnic representation: 13% for female employees and 12% for those of Māori ethnicity.

When the COVID-19 pandemic hit New Zealand, our main objectives as a company were to ensure the health and well-being of our people and continue providing essential services to 1.7 million Aucklanders.

Staff turnover for 2019/20 was 8.2%, a decrease from 10.9% in 2018/19 and further affirms our commitment to be an employer of choice.

One positive outcome from the pandemic and the subsequent nationwide lockdown was the almost instantaneous adoption of technology and tools to work remotely. Around 70% of our workforce worked from home and collaborated digitally. This uptake of digital tools was also reflected in the quantum leap in time spent on training online – staff training through Immerse, our in-house learning platform, increased about 500%, from 16 hours per employee in 2018/19 to 106 hours in 2019/20.

One of the learning modules introduced during the year, Unconscious Bias, was aimed at educating managers and people leaders on the importance of diversity and inclusion and providing practical ways to overcome implicit biases in hiring, allocating work and promoting team members. Around 73% of our people leaders have completed this training to date.

We also introduced two leadership programmes – Future Stars and Growing Greatness – to unlock the potential in our teams and collectively solve some of the challenges prevalent in the water and infrastructure industry. Growing Greatness is specifically aimed at developing mid-career women, to help them see themselves as leaders and fulfil their potential. Building capability not just for Watercare but also for the water and infrastructure industry as a whole will be an ongoing focus for us.

The increase in the number of injuries is an ongoing challenge in our industry. An analysis of the health and safety data shows that the vast majority of the incidents we recorded over the year were due to manual handling resulting in sprains, strains and soft-tissue injuries to backs, shoulders and necks.

We recognise that health and safety does not happen in isolation. A balanced diet, practising and warming up for specific work on any given day, and focusing on mental well-being, all play a critical role in ensuring our people are ready to undertake physical work in a safe and productive way.

Our Industrial Athlete programme includes education and practical support in nutrition, rest and sleep, relaxation and mindfulness, endurance, flexibility and strength, as well as manual handling techniques.

During 2019/20, 82 managers and people leaders participated in Mental Health First-Aid training. This training equipped managers to identify when employees are under mental stress, to support them through these issues and to promote a wellness culture at work.

Wellness continued to be a key focus during the lockdown. We put together a comprehensive welfare plan, including a special COVID-19 paid sick leave policy, food parcel delivery and daily well-being check-ins to support our people – those out in the field doing essential work and those working remotely from home – during this unprecedented time.

The option to work from home has been carried forward after the lockdown ended. This has enabled staff to be more flexible in how they carry out their work and reduced the time involved in commuting and the resulting pressure and stress.

A proactive, comprehensive response to COVID-19

As countries across the world struggle to combat the pandemic, New Zealand has addressed and contained COVID-19 comparatively well.

We believe Watercare's response to COVID-19 continues to be proactive, comprehensive and effective.

New Zealand saw its first COVID-19 case at the end of February 2020. By then, Watercare's risk and operations teams were already monitoring the situation and its potential impact on our workforce, especially those working in wastewater.

In the first week of March, we set up an incident response team, with over 50 people across the business dedicated to various functions: gathering up-to-date information on the pandemic, planning our response across the company, implementing our action plans, managing our supply chain, ensuring our people were looked after, keeping our workforce informed and engaged, and supporting the transition to working from home.

The two main objectives for the incident response team were: keeping our workforce safe and well, and maintaining our critical services.

We introduced a number of plans and policies to provide wrap-around support and safeguard the physical and mental well-being of our people.

We worked on the principle that no staff member would be financially disadvantaged due to COVID-19: we introduced a special COVID-19 paid sick leave above and beyond the annual sick-leave allowance for staff in case they were confirmed to have the virus or asked to self-isolate; organised food and grocery deliveries to operational sites to reduce the risk to our essential workers; and established a welfare support crew to perform daily welfare check-ins over the phone with staff to ensure they stayed connected from inside their bubbles.

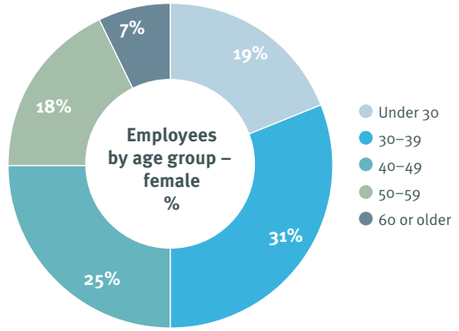
Rigorous protocols for work bubbles and physical distancing were put in place to reduce risk to our site-based operations crew. Our digital team deployed over 500 laptops to enable the remaining teams to work from home and support our other functions.

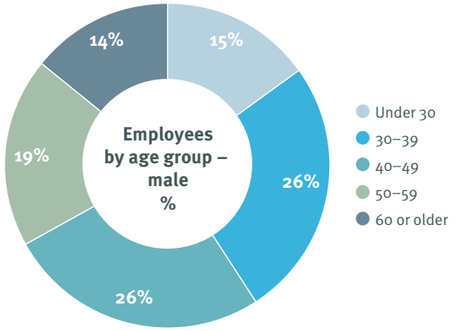
By the end of June 2020, we had successfully ensured that there were no instances of COVID-19 among staff or their extended families. With the robust framework we put in place in March, we are well placed to manage any resurgences.

By looking after our people, we enabled them to look after water and sanitation needs of 1.7 million Aucklanders.

Workforce employment breakdown

The total number of staff has increased (8.7%) from 984 in 2018/19 to 1070 in 2019/20. Most of our employees work in the Auckland region. Watercare also operates laboratory testing services in Wellington, Queenstown and Invercargill. Collective Employment Agreements (CEAs) are Employment Agreements negotiated with one or more unions on behalf of those staff who belong to that union. Individual employment agreements (IEAs) remain the most common type of employment agreements. The majority of employees employed on CEAs are males who undertake operational or maintenance functions within the business. Breakdown below also includes employees servicing the Waikato District Council Contract.





New hires by gender and age

Gender	2019/20	%	2018/19	2017/18
Male	106	54%	132	115
Female	89	46%	70	85
TOTAL	**195**		**202**	**200**

Age group	2019/20	%	2018/19	2017/18
Under 30	66	34%	77	99
30-39	53	27%	63	54
40-49	55	28%	44	31
50-59	18	9%	13	11
60 or older	3	2%	5	5
TOTAL	**195**		**202**	**200**

	2019/20			2018/19			2017/18		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Individual Employment Agreements (IEA)	484	310	794	433	283	716	436	263	699
Collective Employment Agreements (CEA)	198	13	211	195	15	210	173	12	185
Part-time headcount	7	25	32	9	17	26	5	19	24
Fixed-Term Individual Agreements (IEA) >1yr	3	2	5	3	8	11	9	19	28
Fixed-Term Individual Agreements (IEA) <1yr	6	22	28	13	8	21	3	1	4
TOTAL fixed-term and permanent employees	**698**	**372**	**1,070**	**653**	**331**	**984**	**626**	**314**	**940**
Casuals headcount	7	14	21	8	15	23	5	10	15

Staff engagement

We use employee net promoter score (eNPS) for measuring staff engagement every quarter. Our most recent eNPS score has increased 70%, from +21 to +36. In general, our people would recommend Watercare as a great place to work for the work environment and culture, and because the work itself is interesting. Areas highlighted for improvement include more collaboration and alignment between business functions and more transparency around remuneration and how our pay structure compares to the market.

2019/20 Quarter	eNPS Score
1	. +26
2	. +21
3	*
4	. +36

*As a result of COVID-19 level 4 lockdown, the survey was not conducted during this quarter.

Diversity and inclusion

The feedback from the recent eNPS also highlighted the progress made in diversity and inclusiveness: 84% of the respondents said they would be comfortable speaking about their background, identity and cultural experiences and 66% said they see leadership support for diversity and inclusion at Watercare. We also improved gender and ethnic representation with 13% more female employees and 12% more Māori employees recruited during the year.

Investment in employees

Watercare's benefits policy offers all permanent employees the same benefits, regardless of whether they are employed on a full-time or part-time basis. All permanent employees of Watercare are provided with life insurance equivalent to double the amount of their annualised salary, and income protection insurance which would cover 80% of their salary if they were affected by an incident or illness that left them unable to work for a period of time. We also provide discounted membership for health insurance, banking, the N3 staff discount scheme and discounted car parking.

Training per staff member

Our staff received an average of 106 hours-training in 2019/20, excluding time spent on employee orientation. This is an exponential increase compared to 2018/19 and was the result of two factors: inclusion of trade certifications offered in partnership with Connexis as part of the annual training and the introduction of staff training through Immerse, our in-house online learning platform.

	2019/20	2018/19	2017/18
Average staff numbers over the year	1,007	945	920
Average hours of training for permanent employees	106	16	28
Total training spend ($)	$1,235,033.36	$1,092,397.00	$1,354,830.00
Ratio ($ per average staff numbers)	$1,226	$1,156	$1,473

Performance review process

We schedule performance reviews annually for employees. These were conducted in August 2019 for 55% of those who were eligible. During the reporting year, the system used for these reviews was being phased out, and as a result, impacted the completion percentage. For 2020/21 we are targeting a completion rate of 100%.

Parental leave

Watercare offers an additional eight weeks of paid parental leave beyond that provided as part of the government-funded parental leave, and two weeks of paid parental leave for partners. In 2019/20, 94% of employees who took parental leave returned to work, with the rest still on parental leave. The decision to return to work following the completion of their parental leave is solely up to the staff member and is dependent on their individual personal circumstances.

Number who have taken parental leave	2019/20	2018/19	2017/18
Male	17	24	22
Female	12	15	16
TOTAL	29	39	38

Number due to come back from parental leave each year	2019/20	2018/19	2017/18
Male*	N/A	N/A	N/A
Female	16	11	11
TOTAL	16	11	11

Number having come back from parental leave	2019/20	2018/19	2017/18
Male*	N/A	N/A	N/A
Female	15	7	9
TOTAL	15	7	9
% returning after parental leave	94%	64%	82%

* Watercare provides parental leave for male employees also but we do not consider it as a break from employment. Therefore, they are not recorded in the table capturing returners.

Staff turnover

Voluntary turnover for 2019/20 was 8.2%, a decrease from 10.9% in 2018/19.

Involuntary turnover includes retirements, deaths, abandonment of employment and negotiated or managed exits. In 2019/20, there were 30 instances of involuntary turnover.

	2019/20		2018/19		2017/18	
Gender / Age	Voluntary	Involuntary	Voluntary	Involuntary	Voluntary	Involuntary
Male	51	20	63	41	80	19
Female	32	10	36	12	48	8
Total %	8.2%	3.0%	10.9%*	3.8%	13.8%	2.9%
Under 30	28	7	30	3	40	1
30-39	24	5	38	8	46	6
40-49	19	5	16	9	23	2
50-59	9	4	13	17	15	7
60 or older	3	9	2	16	4	11

* Result for 2018/19 recalculated from 13.0% to 10.9%.

Health, safety and wellness

	2019/20	2018/19	2017/18
Lost-time injury frequency rate (LTIFR) – number of lost-time injuries per year per million hours worked	10.6	6.5	3.5
Total recordable injury frequency rate (TRIFR) per million hours worked	20.6	12.4	8.2

We continued to support the reporting of incidents, near-misses and observations more rigorously and to enable this, we launched a new reporting system in October 2019 that should facilitate the availability of more granular data. Our focus over the next year will be to use this new system to analyse trends and patterns so we can proactively manage our health and safety performance.

The year-on-year increase in the number of injuries is an ongoing challenge for us. We have formed an Executive Safety Group and are undertaking an external review in this area.

An analysis of the health and safety data during the year shows manual handling activities were the most common cause of injuries leading to sprains, strains and soft-tissue injuries to backs, shoulders and necks.

A balanced diet, practising and warming up for specific work on any given day, and focusing on mental well-being all play a critical role in ensuring our people are ready to undertake physical work such as manual handling in a safe and productive way.

Our Industrial Athlete programme includes education and practical support in nutrition, rest and sleep, relaxation and mindfulness, endurance, flexibility and strength, as well as manual handling techniques.

Health and safety committees

Watercare has established health, safety and well-being (HS&W) committees, and holds meetings across the company that are in accordance with the Health and Safety at Work Act 2015. Union representatives and members participate in the HS&W committees as well, since their Collective Employment Agreements cover many aspects of health and safety. Nominated HS&W representatives have been trained by the Employers and Manufacturers Association.

Absenteeism

Watercare recorded an unplanned absenteeism rate of 3.3%, which is a slight decrease over last year's result of 3.6%. We provide an occupational health service to all staff, including: medical consultation, influenza immunisation, mandatory vaccinations for those working in certain environments, skin checks and rehabilitation programmes. Employee assistance services such as counselling are available to all staff, either through the company or from self-referral. During the year, we also made available a special COVID-19-related leave to encourage staff to stay home if they were unwell, without worries about their sick-leave allowance.

ACC workplace management practices accreditation

Watercare is a member of Accredited Employers Programme (AEP) for workplace and non-workplace injuries. The programme is administered by the multi-disciplinary third-party claims administrator Gallagher Bassett.

Customer and stakeholder relationships

Value created:
Public health, engaged communities and stakeholders, thriving communities and economy

Our vision is to be trusted by customers and communities for exceptional services. Gaining and maintaining the trust of our stakeholders is an ongoing journey as was underscored by the achievements and challenges of the past year.

As a lifeline utility, we pride ourselves on serving Auckland 24/7, day and night. This was especially true during the COVID-19 lockdown when our frontline operational teams weathered a pandemic to carry out critical repairs and collect samples out in the field for tests so we could continue validating the quality of our water.

Our maintenance crews' efforts attended to and resolved more than 58,000 pipe bursts and leaks during the year – an increase of five percent compared with 2018/19. This can largely be attributed to the extended hot and dry weather, which caused ground contraction and extra pressure on our water pipes. In addition, we also embarked on an extensive programme to identify concealed leaks to help reduce water loss. (Read the case study on page 16 to find out about our proactive leak detection programme.)

The COVID-19 lockdown impacted our ability to serve customers by phone as most of our home-based customer-facing teams could not receive phone calls. Customers therefore had to rely on email and web services to contact us, which affected the response and resolution rate. Despite these challenges, our team of customer champions managed to achieve a net promoter score (NPS) of +43 and our field crew continued to receive exceptional feedback from the community in the course of their work.

The biggest impact of the lockdown on our customers was caused by our inability to read their water meters. This meant that for several months we had to bill customers according to estimates. Estimates are based on previous actual reads, and were not reflective of customers' water consumption patterns during lockdown. This, unfortunately, led to higher-than-normal bills for some customers when we resumed meter readings after lockdown.

2 BILLION LITRES

of water savings by Aucklanders between May 16 and June 30, 2020

We understand that high bills can be alarming, even under normal circumstances, let alone when families have been financially impacted during a pandemic. That is why we increased our support to affected customers by offering flexible payment plans. We also promoted the services of the Water Utility Consumer Assistance Trust (WUCAT). Funded by Watercare, WUCAT supports customers in financial hardship to pay off their water bills; in 2019/20 we forgave $82,500 of debt and about $92,000 has been allocated for 2020/21.

Promoting the value of water to customers and communities was a major focus during 2019/20.

Since we started 2019/20 with an extended dry winter and low levels of water storage in our dams, we have been urging Aucklanders to conserve water. While Aucklanders are already the most water-efficient users in New Zealand, we needed to remind our customers and communities of the direct impact of weather and rainfall on Auckland's water supply and demand.

We launched the *Water is Precious* campaign in February 2020 to increase awareness among our customers and communities about how small changes to their water-use behaviour can make a big difference to the city's overall demand. The impact of taking shorter showers was a key message, supported by the distribution of thousands of free shower timers to households and accommodation providers across the city. Other outreach efforts included talks, demonstrations and free water stations at public events, water-wise competitions and free water-audits offered in partnership with EcoMatters Environment Trust, which is a community organisation that works to deliver environmental initiatives.

We continued to leverage our free education programme to promote the value of water to Auckland schools. (Read the case study on page 32 to learn about the recent programme milestones.)

When the drought led to our water storage levels dropping below 50% in May 2020, we recommended the implementation of water restrictions to Auckland Council. These restrictions banned the use of hoses and outdoor water use for non-potable activities like water blasting and car washing.

We were aware that these restrictions would severely impact building and car washing businesses. Therefore, working with Auckland Council, we provided free access to seven non-potable water sources across Auckland. At the end of June 2020, around six million litres of non-potable water had been sourced from these sites.

We also continued to engage with commercial customers on the status and impact of the drought and the role they could play in addressing potential consequences for their businesses.

Aucklanders have, in turn, heeded our call for water conservation. Since water restrictions were introduced in mid-May, our customers have collectively saved over two billion litres of water. Our top commercial customers have achieved water savings of 14% on average and several companies have adopted innovative practices to minimise the need for potable water in their activities.

While managing the drought and navigating the challenges of a global pandemic, we continued to invest in new infrastructure. By proactively engaging with impacted communities long before the pipes and pumps are installed, we enabled mutually beneficial outcomes. Through the provision of clear and accurate information and commitment to mitigate/offset any adverse effects, our consenting and stakeholder teams have progressed planning work on the following projects: Grey Lynn Wastewater Tunnel, a new access chamber for the engineered overflow point in Hackett Street project, Drury South Wastewater Project and a region-wide Global Tree consent.

While 2019/20 has been a challenging year, we have gained a deeper understanding of our customers and stakeholders. In return, we hope they have developed an appreciation for drinking water being a precious resource. Our focus will continue to be our customers – delivering top-quality water and wastewater services, backed by excellent transactional experiences, and building awareness of water as a precious resource.

100,000 students participated in our free education programme

Watercare's free education lessons for Auckland school kids (from kindergarten to intermediate level) reached a special milestone in August 2019, with the programme clocking its 100,000th pupil.

The occasion was marked with school children at a primary school on the North Shore and involved a lesson on water, water-themed activities and a celebratory cake.

Back in 2000, when this free education programme was established to promote the value of water to school children, it was called 'Adopt A Stream' as it involved freshwater sampling. As more lessons were added, it was renamed the Watercare Education Programme, which, apart from offering on-site lessons, also provides many other resources for teachers.

Many of the lessons have a field-trip element. Learning how to catch and identify freshwater macroinvertebrates or find out about the effects of pollution is all part of the experience. Water experiments cover magnification, refraction and surface tension. In wastewater lessons, students find out how waste solids and liquids are treated and where they end up.

One of the more popular lessons is based on a dramatic re-enactment, where the children get to mimic the journey of water as it travels from sky to sea.

The last couple of years have seen the education programme develop new avenues of engagement. In 2018, we published an illustrated book on water, *Sam and Flo's Amazing Watery Adventure*, written by our then education coordinator Sally Smith. Free copies of this book were distributed to primary and intermediate schools across Auckland. We also developed a comprehensive water sampling kit that schools can use to test water quality of streams and interpret the results.

An illustrated book on wastewater, which is a companion piece to *Sam and Flo's Amazing Watery Adventure*, will be launched in English and te reo Māori in September 2020.

Safe, high-quality water

Water treatment plants

Water treated at all of our water treatment plants, both metropolitan and non-metropolitan, fully complied with the Drinking Water Standards New Zealand (DWSNZ) including bacterial and protozoal compliance criteria. All metropolitan and non-metropolitan water treatment plants continue to maintain an 'A' grade.

Water supply reticulation

All metropolitan and non-metropolitan distribution networks continue to maintain an 'a' grade.

Reliable service

Unplanned water interruptions per 1000 connections

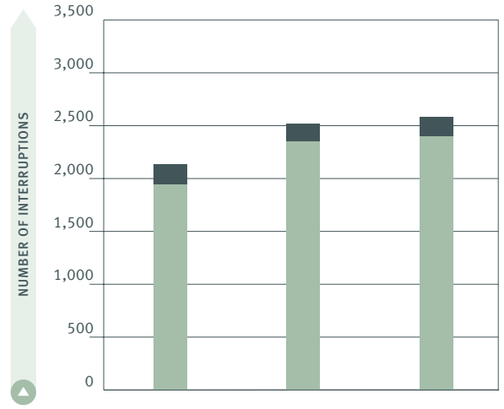
The Auckland region covered a total of 440,000 water supply connections in 2019/20. As a measure of reliability of service, we monitor the number of times the water supply to our customers is interrupted.

We aim to ensure that there are 10 or fewer interruptions per 1000 connections during the year. The result for the 2019/20 year was 4.8 for the Auckland region compared with 5.7 during 2018/19.

Unplanned water interruptions restored within 5 hours

To minimise the impact on our customers, Watercare aims to ensure at least 95% of all unplanned water interruptions are restored within 5 hours. The result for the year was 91% for the Auckland region, compared with 94% for 2018/19.

This result was due to unplanned shutdowns taking longer because of increased traffic management, arborists requirements and complexity of jobs in central Auckland.



Responsiveness

Attending and resolving faults

Type of fault	Description	Target	Achieved
Urgent faults on the water network	Median time taken by our crews to attend to the call-outs	≤60 mins	50 mins
	Median time taken by our crews to resolve the fault	≤5 hours	2.9 hours
Non-urgent faults on the water network	Median time taken by our crews to attend to the call-outs	≤5 days	1.7 days
	Median time taken by our crews to resolve the fault	≤6 days	2.1 days
Faults on the wastewater network	Median time taken by our crews to attend to the overflows caused by blockages or other faults	≤60 mins	43 mins
	Median time taken by our crews to resolve the overflows caused by blockages or other faults	≤5 hours	2.4 hours

Grade of service: Calls answered within 20 seconds

Grade of service (GOS) is an industry performance measure used with the call centre industry, aimed at ensuring calls are answered within 20 seconds. In 2019/20, 59.56% of calls were answered within 20 seconds, compared with 69.53% in 2018/19.

During the year, we identified an error in the way our telephony system measures the GOS (a measure of 120 seconds was incorrectly set up instead of 20 seconds) so our results for 2018/19 and 2019/20 have been restated as below.

- 2018/19 old result (against a measure of 120 seconds) – 81.51%
- 2018/19 restated result (against a measure of 20 seconds) – 69.53%
- 2019/20 result (against a measure of 20 seconds) – 59.56%

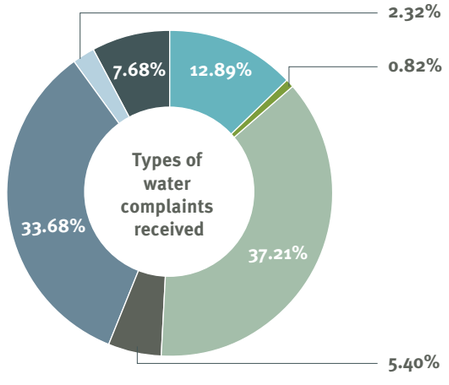
Our focus over the past few years has been on first-call resolution so customer issues are addressed within their first interaction with us. This often requires our customer agents to spend more time on the phone and reduces the pool of available staff to pick up calls in the queue. The prompt and effective resolution of customer issues is our priority rather than the speed of answering calls.

Complaints

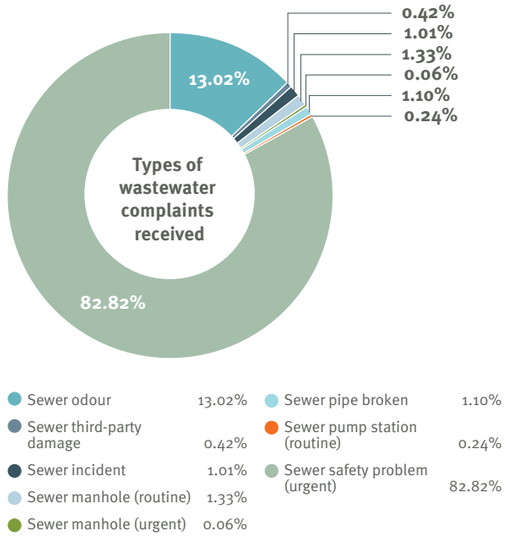
In 2019/20, 1010 complaints were received and of these complaints, 95% (955) were resolved within the stipulated 10-day period, meeting the target of 95% or more.

For the purpose of this measure, a ‘complaint’ relates to transactional complaints such as price increases, account maintenance, employee behaviour, payments and refunds. It excludes calls received about drinking water quality and wastewater issues as these have been reported separately on the next page.

Water



Wastewater



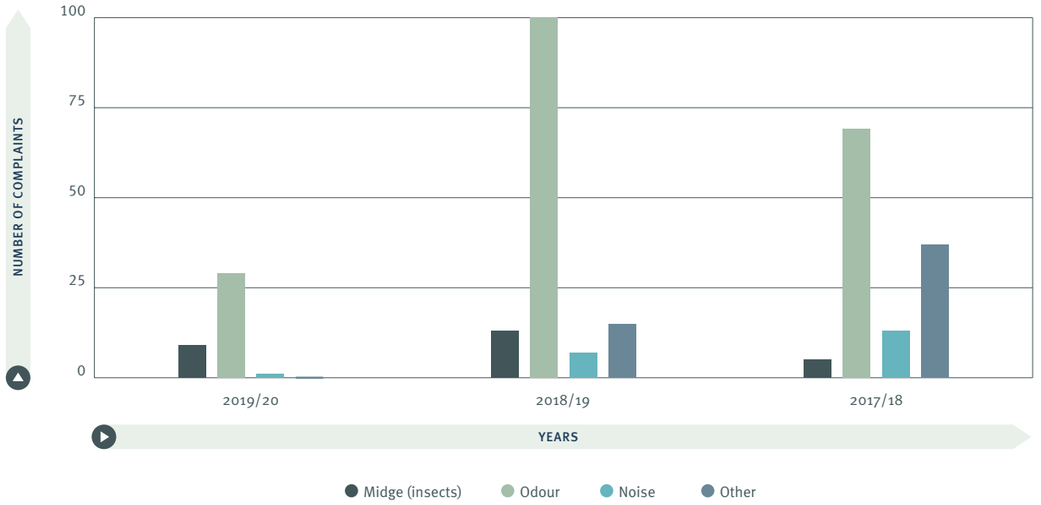
Midge, odour and noise management at operational sites

We record and strive to address all complaints about the effect of our activities on the environment and on the communities living nearby, particularly those related to midges, odour and noise.

Midges are small flies that thrive in water bodies in still and hot conditions. ‘Other’ includes complaints relating to maintenance of our structures such as rubbish in a car park, graffiti, fencing or access.

This year, data does not include complaints from the transmission network, which were included in previous years, due to a system issue and non-availability of data.

Midge, odour and noise complaints



Affordability

In 2019/20, an average Auckland household (comprising three people) spent less than 1.0% (0.87%) of its monthly income on water and wastewater charges.

Cost of water & wastewater services per household per month 2019/20	2019/20 % of average weekly income earnings	Cost of water & wastewater services per household per month 2018/19	2018/19 % of average weekly income earnings	Cost of water & wastewater services per household per month 2017/18	2017/18 % of average weekly income earnings
$84.96	0.87%	$81.00	0.83%	$78.22	0.85%

* Average income for Auckland based on Statistics NZ.

Customer satisfaction and loyalty

Net promoter score (NPS) is commonly used by utilities as a measure of customer loyalty. We use it to measure how satisfied our customers are with Watercare across all their interactions whether it is in person, by phone, email or on our website. Our NPS has stayed relatively stable this year (43 across 2018/19 and 2019/20), despite the challenges in 2019/20.

In the past year, the COVID-19 lockdown impacted the ability of many of our home-based, customer-facing teams to receive phone enquiries. Customers had to rely on email to get in touch, which affected the response and resolution rate. The lockdown also meant we could not read customers' water meters for an extended period of time and had to use estimates to bill them. The ongoing drought and stage 1 water restrictions have had an impact on some businesses so we continue to engage with them and provide advice and support.

Investment in community programmes

Watercare is active within the Auckland community in many ways. We offer a free education programme to primary schools and provide free water at public events.

Our company sponsors the Watercare Harbour Clean-Up Trust, which works to remove litter from Auckland's harbours and inner-gulf islands, and promotes the concept of clean, clear, rubbish-free waterways. We also sponsor Trees for Survival and Waikato RiverCare, two conservation programmes in the Hūnua Ranges and Waikato River respectively. Watercare funds the Water Utility Consumer Assistance Trust, which helps domestic customers facing financial difficulties to manage their water costs.

We also continued sponsoring the Mark Ford Ngā Tapuwae Scholarship to acknowledge the company's late chief executive Mark Ford for his outstanding contribution to the industry. Students who are studying engineering at the University of Auckland are able to apply for this scholarship which is valued at $5000.

Programme	2020	2019	2018
Watercare Education Programme	$25,837	$11,507	$35,057
Watercare Utility Consumer Assistance Trust	$100,000	$120,000	$80,000
Trees for Survival	$3,450	$3450	$3,450
Watercare Harbour Clean-Up Trust	$325,000	$325,000	$306,250
Waikato RiverCare	$56,000	$50,000	$50,000
Mark Ford Ngā Tapuwae Scholarship	$5,000	$10,000	$10,000
Total	**$515,287**	**$519,957**	**$484,757**

Encouraging water efficiency

In 2019/20, the gross per capita consumption of water was 268.6 litres per person per day.

Our target for 2019/20 was to maintain consumption within the 264 litres per person per day (+/- 2.5%) band, to meet the overall demand management target of reducing demand by 15% by 2025, compared to 2004 consumption levels.

The demand for water from Aucklanders was higher than expected in 2019/20 as the region experienced a prolonged dry winter followed by a severe drought with 25% less rainfall than normal.

Contributing to the high demand were two factors: the COVID-19 pandemic and subsequent lockdown led to increased residential demand during March, April and May; the extremely hot summer caused consumers on rainwater tanks to purchase more water from tanker operators during the warm and dry periods of the year. This means that the water sold to tanker operators, which is supplied by our metropolitan network, is then distributed to consumers that are not connected to our metropolitan network.

We continue to use Statistics NZ's 2018 medium population projections which include consumers living in commercial rest homes, hotels and hospitals and other similar dwellings. We have added 1.8% to this figure to account for year on year growth based on Auckland Council's median growth forecast and deducted the percentage of the population that is not connected to our water supply network using our 2020 water connection data.

Our engagement with customers on water efficiency increased in 2019/20. We launched a new outreach programme "Water is precious", with the objective of educating Aucklanders to value their water supply. This initiative includes a portal with water efficiency resources and activation events where we engaged with the public on their water consumption behaviours and then subsequently on the drought and ways to make voluntary water savings.

Assets and infrastructure

Value created:
Future-proofed growth and supply assurance, high-performing infrastructure

Despite the challenges over the past 12 months, 2019/20 has been a record year for investment in water and wastewater infrastructure for Auckland.

We have invested about $552 million – $164 million towards building water supply infrastructure and another $388 million on infrastructure for wastewater – during the past year.

This investment is part of our long-term planning to ensure we build adequate infrastructure to cater for Auckland's population growth and maintain or improve service levels while addressing the impacts of a changing climate.

Over the past five years, we have been consistently increasing our annual capital expenditure. The number of applications for new connections we receive per day has increased from 50 in 2017 to 60 in 2018 and hit 70 in 2019. Our capital expenditure reflects the level of growth in Auckland that we need to cater for as well as the infrastructure we need to replace.

Some of the key projects we progressed this year include:

- a tunnelling breakthrough for the final section of the Hūnua 4 Watermain. This 31-kilometre-long pipeline, running from Redoubt Road in Manukau to the city, when complete, will ensure security of supply and provide additional distribution capacity
- a new water reservoir in Pukekohe East, which is close to commissioning and will enable us to produce more water at the Waikato Water Treatment Plant and ensure security of supply for the area. (Read the case study on page 40 for more details.)
- a new pump station and watermain connecting Albany and Pinehill reservoirs to boost supply to this rapidly-growing area
- application for resource consent for the Huia Water Treatment Plant replacement, which will provide improved treatment processes and ensure security of supply. The process is now at the hearings stage, with further environmental assessments on Kauri dieback in the area underway. A decision on the consent is expected in late 2020.
- tunnelling in Upper Harbour for phase 1 of the Northern Interceptor, which is a new wastewater pipe being built in stages that will redirect wastewater flows currently going to the Māngere Wastewater Treatment Plant to the Rosedale Wastewater Treatment Plant, and has the capacity to service the additional flows and cater for growth
- pre-commissioning works (mechanical, electrical and roading) for stage 1 of the Pukekohe Wastewater Treatment Plant upgrades, expected to be complete by January 2021. These upgrades will significantly improve treatment processes, provide capacity for growth and improve the water quality of the local stream.

$552M invested in infrastructure during 2019/20

will provide an additional supply of 40 million litres per day (MLD) for the 2020/21 summer. We are also building another plant adjacent to the existing Waikato plant that will provide an additional 50 (MLD) by mid 2021.

While our focus is on planning and building more infrastructure for a growing Auckland, we also want to build better. In September 2019, we announced a $2.4 billion construction partnership, the 'Enterprise Model' (EM), with Fulton Hogan and Fletcher Construction for the delivery of water and wastewater infrastructure for Auckland over the next 10 years.

The long-term and collaborative nature of this contract is a first for New Zealand and seeks to address many of the challenges faced by the construction industry, while ensuring we build infrastructure in an efficient, safe and sustainable manner. EM has been selected as the first 'Beacon Project' by the Construction Sector Accord, which is a joint commitment from Government and industry to work together to create a high-performing construction sector for a better New Zealand.

In its first year, the EM team has focused on establishing culture – a new way of working in partnership and laying the foundations to achieve our ambitious sustainability, cost and safety targets. (Read the case study on page 44 for more details.)

The onset of COVID-19 and the ensuing lockdown had an impact on our infrastructure projects. All construction works, except those considered essential for our operations, were closed down for a period of five weeks. These activities resumed once the Government downgraded to Alert Level 3, with physical distancing and site separation protocols in place, and have progressed on schedule to date.

This investment is part of our long-term planning to ensure we build adequate infrastructure to cater for Auckland's population growth and maintain or improve service levels while addressing the impacts of a changing climate.

But it is not only long-term infrastructure that we focused on during the year. Our teams have also been fully involved in the drought response, specifically to plan and design new infrastructure to augment water supply in the short term.

Our Waikato and Onehunga water treatment plants are undergoing upgrades to increase production capacity. We are also working to return to supply two former water sources – Hays Creek Dam in Papakura and a bore in Pukekohe – which will provide additional capacity by December 2020. Planning, consenting and construction on these projects is progressing at pace, and these efforts

New reservoir in Pukekohe to improve resilience

Watercare's largest reservoir in more than 25 years is close to completion.

The $34-million reservoir has been under construction for the last two years and will be in service in September 2020.

At a height of 12 metres, a diameter of 80 metres and capacity of 50 million litres, the Pukekohe East Reservoir at Runciman Road will be one of our largest reservoirs.

Once operational, it will help to ensure security of supply within the southern region and wider Auckland. The new reservoir can store almost 50 times the volume of the existing balance tank and will strengthen our network storage and resilience.

The increased storage capacity means water can be supplied for longer periods in the reverse direction or 'back-fed' to the surrounding communities in Pukekohe, Glenbrook Beach, Patumahoe, Clarks Beach, Waiau Beach as well as other parts of Auckland.

Currently treated water is pumped from the Waikato Water Treatment Plant through the Waikato No. 1 Watermain to the small concrete balancing tank. With the new reservoir, water will flow by gravity from the new Pukekohe East Reservoir to the Redoubt Road reservoirs in Manukau.

Throughout construction, our project team has engaged with the local community through fortnightly updates, open days and site tours. At our initial open day we used virtual reality (VR) digital technology to demonstrate what the project would look like when it was completed. Visitors got a feel for the size of the reservoir and were able to understand how we would reduce the impact on the environment.

The project site also has space allocated for the construction of another reservoir in the future, to cater for population growth and demand.

The Pukekohe East Reservoir will be one of our largest reservoirs at

50 MILLION LITRES CAPACITY

High-performing infrastructure

Unplanned wastewater interruptions

The number of unplanned wastewater network interruptions caused by bursts and chokes is a measure of the integrity of the system. We aim to keep them fewer than 10 for every 1000 properties. The result for the year was 9.3 for the Auckland region.

Dry-weather overflows

Dry-weather overflows are generally caused by incorrect disposal of wet-wipes, fats, oils and grease down the wastewater network which lead to blockages in the pipes resulting in wastewater overflows.

The number of wastewater overflows from our retail network during dry weather is a measure of the network's capability to meet current demand. The result for the year was 0.55 dry-weather overflows per 1000 connections, which is well under the target of 5 or fewer.

Wet-weather overflows

Wet-weather overflows are caused by heavy rain and are a mixture of stormwater (rainwater run-off from roofs and roads) and wastewater. In heavy rain, the stormwater that drains from the average roof is equivalent to the wastewater flows from more than 40 households.

The number of wet-weather overflows for the transmission network (bulk mains) per number of discharge locations was 1.46, which is within the target of 2 or fewer overflows.

The Central Interceptor Wastewater Tunnel and the Western Isthmus Water Quality Improvement Programme are examples of projects underway that will add capacity to the wastewater network, protect the environment from overflows and cater for Auckland's growth.

Effective asset management

Water loss

Water loss is the difference between the volume of water produced and the volume of water sold, allowing for a percentage of water produced for operational and firefighting purposes. For 2019/20, the result was 13.2%, against a target of 13% or less.

Portions of our non-revenue water are also attributed to meter inaccuracy at our bulk supply points and theft. However, leaks are the biggest contributor to our non-revenue water figures.

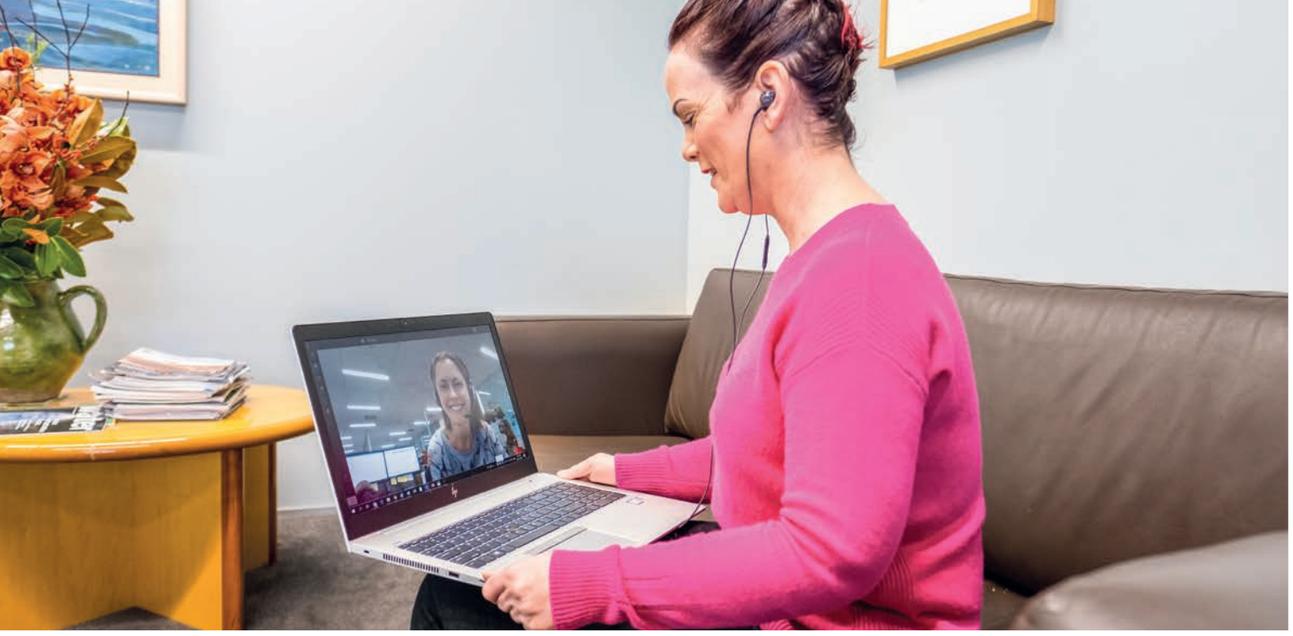
This year, we are reporting real water loss percentages for the period February 2019 to January 2020. This is due to the lack of up-to-date meter-reading data during the national lockdown period and subsequent alert levels, which meant our meter readers could not enter properties to access the water meters.

Leaks are unavoidable for all water networks around the world. There were more leaks on our water network this year compared to previous years. This was due to two factors: the extended hot and dry weather led to the ground contracting around the pipes, causing more cracks and breaks; the amount of construction happening across Auckland and consequently more instances of third-party damage to our pipes. While Auckland's network is one of the top performers in New Zealand in terms of real water loss, we know there is room for improvement, and we are committed to reducing the volumes of water lost in the future.

We began a proactive programme of leak detection targeting the Maungakiekie, Auckland Airport, Konini and Khyber bulk supply zones, since they have the highest percentage of non-revenue water in the network. Over 1140 kilometres of water pipes have been investigated for leaks using acoustic leak detection technology. We have identified and fixed leaks contributing to an estimated 2.35 million litres of water loss per day. We aim to have checked 6000 kilometres of pipes – almost two thirds of our network – by July next year.

Bulk supply zone	Kilometres checked	Leaks found	Estimated volume saved (MLD)
Auckland Airport	260	127	0.40
Maungakiekie	394	390	1.00
Konini	299	180	0.60
Khyber	187	121	0.35

We also introduced additional district metered areas (DMA) in the Maungakiekie and Manukau bulk supply zone and more are planned for 2020/21. DMAs are discrete areas of a water distribution network. DMAs allow us to measure water consumption at a suburb level and enable more accurate total volume of water analysis, and better identification of unbilled uses.



Intellectual capital

Value created:
Industry-leading thinking and processes

Our aspiration is to be a utility of the future – one that leverages technology and data to work smarter and serve our customers and communities better. As a result of COVID-19, we moved closer to our goal of using technology more effectively.

Back in March 2020, as COVID-19 cases in New Zealand began to increase, it became critical for our teams to be properly equipped to work remotely.

While there was a programme under development to enable this, it was scheduled to be implemented over months, not days. But with a nationwide lockdown looming, the priority for our business was to ensure the continuity of critical water and wastewater services to Aucklanders during the pandemic.

We needed to equip more than two-thirds of our staff to work from home, and to continue to support the remaining essential workers who needed to be physically running our plants and other sites.

Through a super-accelerated programme, new laptops were provided to staff with some basic self-service instructions. Hundreds of laptops were deployed within a matter of days.

Like many businesses in New Zealand, Watercare was not set up to cope with such a high volume of users working remotely within a short space of time. This necessitated a quick change to increase network bandwidth. Security was an important consideration too, with the increased risk of cyber threats in light of the uncertainty caused by COVID-19.

Having sorted infrastructure, security and bandwidth, we focused on training and communication.

For many of our people, working remotely was a completely new proposition and they needed the right platform to communicate, to check in with each other and collaborate remotely.

We introduced Microsoft Teams to all staff and commenced a company-wide daily online education series to promote the tools.

The almost-overnight transition required people who would normally be hesitant with new technology and change to roll up their sleeves and dive in. It has been challenging, but we have seen our people embrace these changes with enthusiasm.

70% of staff equipped to work from home

Like many businesses in New Zealand, Watercare was not set up to cope with such a high volume of users working remotely within a short space of time. This necessitated a quick change to increase network bandwidth. Security was an important consideration too, with the increased risk of cyber threats in light of the uncertainty caused by COVID-19.

Beyond the increased use of technology, the past year also saw the business demonstrate best practice and leadership in several areas:

- We were commended for our transformational efforts in the sustainability and resource recovery area and recognised as a 'Utility of the Future Today', a global programme now in its fourth year.

  Utility of the Future Today celebrates the achievements of water utilities that are making the shift from a traditional wastewater treatment system to a resource recovery centre and leading the overall sustainability and resilience of the communities they serve. This initiative was launched by four global water sector organisations—the National Association of Clean Water Agencies (NACWA), the Water Environment Federation (WEF), the Water Research Foundation (WRF) and the WaterReuse Association, with input from the US Environmental Protection Agency (EPA).

  We were one of the 43 water utilities that have been recognised and the only one in the list outside the US.
- Our $2.4 billion Enterprise Model construction partnership has been chosen as the first 'Beacon Project' by the Construction Sector Accord. The accord is a joint commitment from government and industry to work together to create a high performing construction sector for a better New Zealand. (Read the case study on page 44 to learn more about this partnership and its objectives)
- The Central Interceptor Wastewater Tunnel is New Zealand's largest environmental project underway at this time. When complete, it will increase network resilience, accommodate Auckland's growth and deliver improved environmental outcomes. Along with these positive environmental outcomes, it is also being delivered in a sustainable way.
- In June 2020, the project was awarded a "leading" rating for sustainable design – the highest possible rating for a project – by the Infrastructure Sustainability Council of Australia (ISCA). The rating covered six main themes: management and governance, using resources, emissions, pollution and waste, ecology, people and place, and innovation.

  In particular, the Central Interceptor scored highly in the area of innovation due to the following initiatives:
  - piloting wastewater reuse for the operation of the tunnel-boring machine (TBM), reducing the need for potable water
  - contributing to the rehabilitation of Puketutu Island, by reusing the tunnel spoil as cover and reducing the need for imported fill
  - building a dedicated training centre for the project, which includes a life-sized TBM cutterhead
  - developing a new methodology for assessing ecological enhancement
  - using a single-pass tunnel-lining methodology.

Reducing infrastructure carbon through collaboration

In September 2019, Watercare signed a $2.4 billion construction partnership with Fulton Hogan and Fletcher Construction for the delivery of water and wastewater infrastructure for Auckland over the next 10 years.

With this partnership, we are seeking to address many of the challenges faced by the construction industry, while also achieving our ambitious sustainability, cost-efficiency and well-being targets (40% reduction in "build carbon", 20% reduction in cost and 20% improvement in health, safety and well-being outcomes).

Historically, Watercare has delivered on its large infrastructure programme on a project-by-project basis. With this new long-term partnership, we aim to leverage the scale of the works to incentivise innovation and deliver a programme of work – rather than discrete projects – to drive greater cost-efficiency and, more importantly, create sustainable infrastructure. This approach is a first for New Zealand and combines many of the most successful infrastructure delivery learnings from around the world, with our local adaptations.

In its first year, the Enterprise Model has identified four key steps – commit to action, understand our carbon footprint, build our internal processes and review our approach to procurement – to achieve a step-change reduction in carbon in infrastructure construction.

At the end of 2019/20, the Enterprise Model team had:

- created a toolkit which encompasses all elements necessary for successful 'programme first' delivery, e.g. governance, processes, procurement, ways of working and technical solutions
- strengthened the business case process to ensure that carbon reduction targets must be addressed, including a challenge to pre-existing business cases, within the design options
- initiated carbon reduction outcome expectations within the upstream supply chain
- included dashboard reporting on carbon and cost reductions on the contract to incentivise performance
- began embedding culture and mindset behavioural change expectations and methods to measure realised change.

An infrastructure carbon baseline was developed to provide insights into estimated carbon emissions for Watercare's capital works programme under the Enterprise Model. Key insights include:

- The carbon emissions for these projects is more than Watercare's expected operational emissions over the same period of time.
- Most of the capital carbon occurs in networks and transmission, as opposed to treatment infrastructure.
- Concrete and steel make up a large percentage of the baseline.

This baseline, at a programme-wide level, is believed to be the first in Australasia. Now with a clear understanding of the capital carbon involved in our planned programme of works, we are starting to apply a carbon reduction hierarchy to achieve potential carbon savings. We are challenging the root cause of infrastructure as well as our standard designs and approaches, with an early focus on concrete, pipe material and low-carbon construction techniques.

Intellectual capital

As New Zealand's largest water company, we pride ourselves on being industry leaders, demonstrating excellence and innovation across many areas in the water and infrastructure industry. Below are some of the awards our people have received in 2019/20.

Award	Winners
Water New Zealand Awards	**Hynds Paper of the year** titled "Developing a corrosion strategy to protect NZ's largest Wastewater Asset" – **Stephen Grace** (co-writer), **engineering manager for Central Interceptor** **Runner-up Hynds Paper of the year** titled "A How-to Guide for Securing 25-Year Discharge Consents" – **Mark Bourne** (co-writer), **head of servicing and consents** **Project of the year** for Army Bay Wastewater Outfall pipe – **project managers John McCann** and **Dirk DuPlessis** This project also won **Best Photo** of the year.
WASTEMINZ Awards of Excellence	**Best written paper** titled "The potential value of biosolids in New Zealand – an industry assessment" – **Rob Tinholt, resource recovery manager**
Civil Contractors New Zealand (CCNZ) Excellence Awards	**Wynyard Quarter Pump Station project** was recognised in the projects under $5 million category. **Peter Kukulsky, project manager** **Army Bay Wastewater Outfall pipe** was recognised in the projects between $20 million and $100 million category – **project managers John McCann** and **Dirk DuPlessis**
ACENZ Innovate Awards	**Gold Award of excellence** for the **Māngere Biological Nutrient Removal Upgrades project – project manager Sven Harlos**
Diversity Works	**Chief operations officer Shane Morgan** was a **finalist in the Walk the Talk** category
No-Dig Down Under Awards – Melbourne	**Army Bay Wastewater Outfall pipe** was recognised for the innovation, and world-record-setting trenchless drive – **project managers John McCann** and **Dirk DuPlessis**
No-Dig International Awards – Florence	**Project of the Year 2019** – **Army Bay Wastewater Outfall pipe** was recognised for the innovation, and world-record-setting trenchless drive – **project managers John McCann** and **Dirk DuPlessis**
QUESTAR International Video Awards	Our **Central Interceptor public education video** won a **silver award in the educational/ informative category** at the 2020 QUESTAR Awards – **Maxine Clayton, Janie Smith, Rachel Hughes**
Australasian Reporting Awards	Our 2019 Annual Report, managed by **Julian Stewart**, **Anusha Vishnampet and Chris Thurston**, won the **Best Communications (Public and Not-for-Profit Sector) award**. Watercare also won its 15th consecutive **Gold Award** for excellence in reporting at the Australasian Reporting Awards.

Financial capital and resources

Value created:
Minimum cost, efficient, financially-robust provider

Water utilities across the world constantly balance two challenges: planning and building infrastructure for a growing population and ensuring minimum-cost services so communities are not constrained to access a necessity of life. In the past year, COVID-19 and the severe drought presented additional challenges for Watercare.

The predominantly hot and dry year resulted in increased demand for water and higher than budgeted revenue but it also caused more breaks and bursts in our pipes, leading to more unplanned maintenance and increased operating expenses. We also invested in additional workplace infrastructure such as laptops, personal protective equipment (PPE) and technology solutions to enable our staff to continue working safely throughout the lockdown.

In response to the drought, we are investing $224 million to augment our water supply in the short term and a further $780,000 towards our proactive leak detection programme to reduce water loss. Above and beyond the drought, our investment in capital infrastructure and systems has also steadily increased over the last five years, with $615 million of capital expenditure in 2019/20, to keep pace with population growth and demand for our services.

We plan and build infrastructure based on growth projections from Auckland Council. Our planning and consenting horizons are long and underpinned by the need to build at the right time, right size and in the right place. As a council-controlled public water utility, we have a responsibility to invest prudently and ensure optimum use of existing infrastructure.

The drought and stage 1 water restrictions in Auckland have shed more light on customer and community expectations from a municipal water utility: the need for and cost of providing expensive drought-proof infrastructure versus a drought-resilient infrastructure where demand management and water conservation play a key role. This will be an ongoing long-term conversation with our stakeholders.

Being a council-owned entity has an impact on our borrowings to fund new infrastructure. We fund our capital infrastructure programme and systems through a combination of user charges and borrowings. We borrow through council's centralised treasury so our capital works, though fully-funded, have an impact on the council's debt levels.

In 2019/20, debt only increased by $245.6 million, despite our capital expenditure being at its highest ever. Since the council amalgamation in 2010, when Watercare became an integrated water supplier for Auckland, we have invested $2.7 billion to build water and wastewater assets, with debt extended by only $725 million. We plan to invest $4.8 billion on water and wastewater projects over the next eight years, with a further $5.2 billion in the following 10 years.

We work closely with the Auckland Council treasury team to ensure we manage our debt and cash flow requirements effectively.

In line with the Mayor of Auckland's Letter of Expectation (LoE), we continued to explore new opportunities for revenue in 2019/20.

In October 2019, Watercare started providing 'three waters' services to Waikato District Council (WDC) via a contract of service for a period of up to 28 years, focusing on better environmental outcomes and improved water services in northern Waikato.

WDC continues to own all assets, while Watercare manages the infrastructure above and below the ground. This includes 16 treatment plants (9 wastewater, 7 water), 106 pump stations, 805 kilometres of water pipes, 323 kilometres of wastewater pipes, 154 kilometres of stormwater pipes, 31 reservoirs and 16,644 homes and businesses in the region. At the commencement of the contract 29 WDC staff joined Watercare's workforce.

We also acquired majority shares in Wellington-based software company Lutra Limited. Lutra develops software for the water and wastewater industry and this acquisition will enable us to improve process efficiencies by utilising their software systems and in return, we can accelerate their growth plans.

Our focus for the year ahead will be on the reform of the water sector by the central government, including the proposed introduction of a water services regulator. We will collaborate with council in the planning and subsequent implementation of any changes that will contribute to improved water quality and service outcomes for Auckland.

Watercare becomes majority shareholder of Lutra

In February 2020, Watercare became the majority shareholder of Wellington-based software and process engineering company Lutra.

Lutra provides software and technical services to improve the performance of people and processes involved in water and wastewater operations.

The company has a team of 25 people which includes highly-skilled process engineers, software developers and data analysts, and has strong relationships with a number of New Zealand councils and commercial customers.

The clear synergies between Lutra and Watercare were a key driver for this acquisition. Watercare seeks to gain efficiencies by implementing Lutra's software and training systems at our sites and we can help Lutra accelerate and realise their software development growth plans.

This acquisition also strengthens Watercare's ability to prepare for the upcoming water industry regulations.

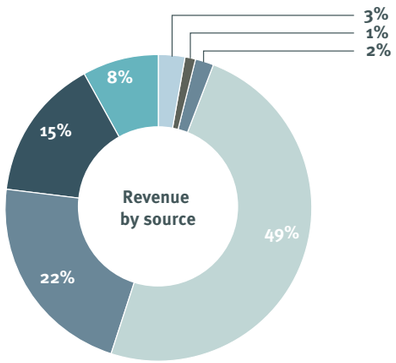
The long-term aspiration for both companies is to see a cross-fertilisation of staff, with both organisations sharing knowledge, experience and learning from each other.

Two of Watercare's executive team members are on the board of Lutra and the company retains its name and continues to operate from its head office in Wellington.

Financial responsibility

1. Revenue

Total revenue at $752.3 million in 2019/20 compared favourably with $715.2 million in 2018/19. Water and wastewater revenues of $534.0 million were $18.5 million ahead of 2018/19 (a 3.6% increase) with $4.2 million of the increase due to the 2.5% price increase on 1 July 2019 and $14.1 million largely as a result of the overall increase in demand because of the prolonged hot and dry weather. Revenue from Infrastructure Growth Charges totalled $109.8 million compared with $103.8 million in 2018/19, still only recovering 33% of the $332 million capital expenditure on growth projects for the year. Other key elements of revenue included $64.5 million for the cost of physical assets funded by external parties and vested to Watercare.

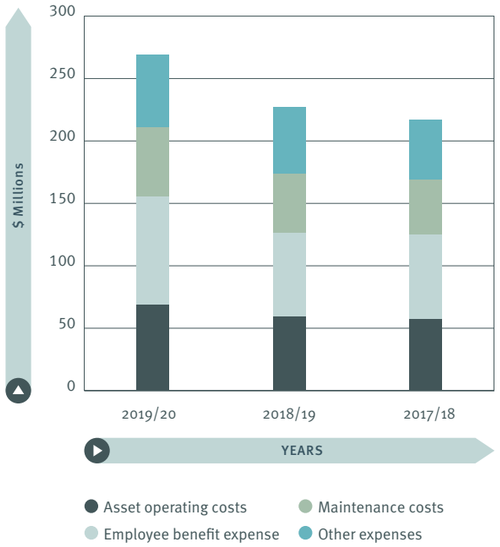


New meters and service connections	3%	Water revenue	22%
Laboratory services	1%	Infrastructure Growth Charges	15%
Other	2%	Vested assets	8%
Wastewater revenue	49%		

2. Operating expenses

Operating expenses of $268.6 million were $40.2 million higher than budget for the year. This was primarily due to higher than budgeted asset operating costs and maintenance expenses associated with the drought.

Operating expenses increased 18.6% in 2019/20 compared with 2018/19 and have grown an average of 6.6% per annum over the past four years. The increase in maintenance costs is largely due to unplanned maintenance.



3. Finance costs

Total finance costs of $81.7 million were incurred during the year of which $25.5 million was treated as a capital cost on large scale, long-term capital projects. The remainder of $56.2 million was expensed to the Statement of Comprehensive Revenue and Expense.

The overall average interest rate was 4.42% compared with 5.36% in 2018/19.

4. Operating surplus from trading operations

An operating surplus from trading operations of $170.7 million was achieved in 2019/20, with revenue $54.9 million ahead of budget, and total expenses $30.7 million higher than budget.

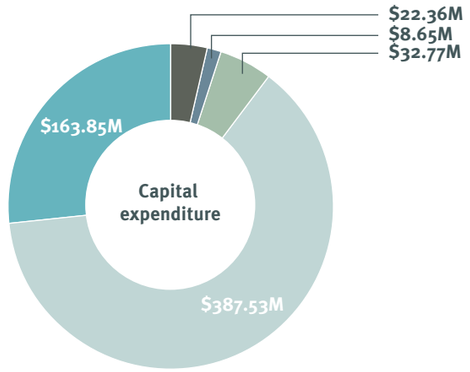
5. Net surplus for the year

The reported operating surplus from trading operations was prior to a non-cash adjustment for the loss on disposal of property, plant and equipment and restructuring costs.

The loss on disposal below the operating surplus from trading operations line items delivered a net surplus after tax of $73.8 million for the year ending 30 June 2020.

6. Net new debt

In 2019/20 $245.6 million of net new debt was entered into by Watercare. Consistent with our agreement with Auckland Council's centralised treasury, all new debt is provided by Auckland Council to maximise efficiency from group borrowings.



New meters and service connections	$22.36M
Other projects	$8.65M
Corporate	$32.77M
Wastewater projects	$387.53M
Water projects	$163.85M

Debt is used to fund capital expenditure that is directed at improving the quality of services provided by Watercare as well as to service the effects of population and construction growth in Auckland.

7. Total assets

Total Watercare assets grew from $10.39 billion to $10.84 billion in 2019/20. This increase related to the cost of new infrastructure spending being capitalised during the year.

8. Customer debt

Our primary performance measure for the management of debtors is the value of payments outstanding for 31 days or more from due date. This year, the outstanding customer debt was $10,440,330, an increase of 39% compared with 2018/19.

The average amount of outstanding debt was $491 this year compared with $383 in 2018/19.

		% of total
Debit balances 31+ days (end of June 2020)	$10,440,330	22.3%
Number of accounts with 31+ days' debt	21,244	7.7%
Average debt (31+ days)	$491	

* Excluding council group and Infrastructure Growth Charges

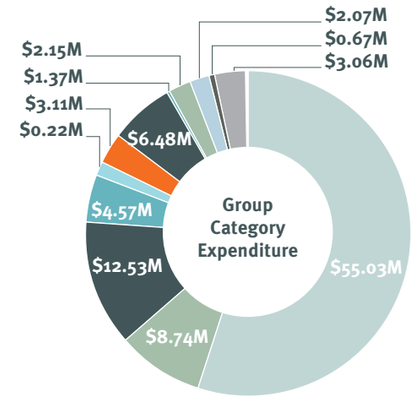
9. Supply chain and savings

Watercare's supply chain team has focused on the development and implementation of a supplier code of conduct. This has been widely acknowledged by our suppliers. During 2019/20 opex savings of $890,000 was achieved from procurement of polymer, new meter connections and our security systems upgrade. We also facilitated an estimated capex/opex cost avoidance of $3.16 million through the procurement of concrete-lined steel pipe, switchboards and engineering professional services.

Top 15 suppliers

No.	Supplier	Value $
1	Fulton Hogan Limited	92,212,254
2	The Fletcher Construction Company Limited	79,776,928
3	Ghella Abergeldie JV	64,682,455
4	McConnell Dowell – HEB Joint Venture	40,526,850
5	McConnell Dowell Constructors Limited	40,415,150
6	Downer New Zealand Limited	33,564,074
7	New Zealand Transport Agency	29,260,622
8	City Care Limited	26,649,877
9	Pipeline and Civil Limited	17,969,898
10	Fulton Hogan Land Development Limited	17,406,560
11	March Cato Limited	12,710,952
12	Genesis Energy Limited	9,678,848
13	Steelpipe Limited	9,464,504
14	Beca Limited	8,536,166
15	Jacobs New Zealand Limited	8,497,262
	TOTAL	**491,352,402**

Procurement expenditure by category



Construction	55.03%	Business support	6.48%
Engineering prof fees	8.74%	Property	0.22%
Maintenance	12.53%	Operations support	2.15%
Equipment and spares	4.57%	Chemicals	2.07%
Retail	1.37%	Waste	0.67%
Information services	3.11%	Utilities	3.06%

Kōwhai trees in Watercare's Hūnua forests

SECTION 3
LEADERSHIP AND GOVERNANCE

Left to right:
David Thomas, Colin Magee, Hinerangi Raumati-Tu'ua, Julia Hoare, Margaret Devlin, Dave Chambers, Brendon Green, Frances Valintine, Nicola Crauford and Rob Fisher

OUR BOARD

Margaret Devlin

BA (HONS) BUSINESS STUDIES, FINANCE AND ECONOMICS, CFINSTD

Chair
Margaret Devlin is a professional director with extensive experience in governance and executive management primarily in the water and infrastructure sectors in New Zealand and the United Kingdom. She has served as a director for a range of entities with a particular focus on audit and risk. Margaret is a Chartered Fellow of the Institute of Directors.

General disclosure of interests: Director, Meteorological Services of NZ Limited; Director, Waikato Regional Airport; Director, Titanium Park (wholly-owned subsidiary of Waikato Regional Airport); Director, IT Partners Group; Director, Aurora Energy; Independent Chair, Audit and Risk Committee, Waikato District Council; Chair, Advisory Board Women in Infrastructure Network; Councillor, Waikato University; Deputy Chair, WINTEC; Director and Chair, Lyttelton Port Company Limited; Chartered Fellow, Institute of Directors; Director, Infrastructure New Zealand; Chair, Hospice Waikato; Member, Institute of Directors Waikato Branch Committee.

Julia Hoare

BCOM, FCA, MINSTD

Deputy Chair, Chair of Audit and Risk Committee (until March 2020)
Julia Hoare brings a comprehensive range of commercial, financial, tax, regulatory and sustainability expertise to Watercare which she developed over the course of 20 years as a partner with PwC. She retired from the PwC partnership on 31 December 2012 to pursue a full-time corporate governance career.

Julia is a fellow of the New Zealand Institute of Chartered Accountants and is the Vice President of the Institute of Directors' National Council.

General disclosure of interests: Director, AWF Madison Group Limited; Deputy Chair, The a2 Milk Company Limited; Director, The a2 Milk Company (New Zealand) Limited; Director, Port of Tauranga Limited; Chair, Auckland Committee, Institute of Directors; Member, Advisory Panel to External Reporting Board; Vice President, Institute of Directors' National Council; Director, Auckland International Airport Limited; Director, Meridian Energy Limited.

Nicola Crauford

BSC (HONS), PHD, FENGNZ, CPENG, FAICD, CFINSTD

Chair of the AMP and Major Capex Committee
Dr Nicki Crauford is a professional company director with extensive experience in infrastructure including executive roles in oil and gas and the electricity sectors in New Zealand and the United Kingdom. She is currently Chair of GNS Science and a director of Pioneer Energy Limited and the Environmental Protection Authority. She is a former director of Genesis Energy, Wellington Water, Orion New Zealand, and Fire and Emergency New Zealand.

Nicki is a Chartered Professional Engineer, a Fellow of Engineering New Zealand and the Australian Institute of Company Directors and a Chartered Fellow of the Institute of Directors.

General disclosure of interests: Chair, GNS Science Limited; Director, Environmental Protection Authority (EPA); Member of Electoral Authority – Cooperative Bank Limited; Director and Shareholder, Riposte Consulting Limited; Director, Pioneer Energy Limited; Board member Kāinga Ora – Homes and Communities; Director, CentrePort Limited Group; Trustee, Wellington Regional Stadium Trust; Member of the Statistics New Zealand Advisory Board.

Brendon Green

BE CHEM AND PROCESS (HONS), POSTGRAD DIPLOMA IN DAIRY SCIENCE AND TECHNOLOGY

Chair of the Strategic Transformation Programme Committee and the Committee for Climate Action Committee
Brendon brings a career spanning 25 years in NZ and offshore largely in the energy sector covering thermal generation, oil and gas exploration and renewables, notably wind and geothermal. Over recent years he has been involved in the decarbonisation of the transport sector by way of electric and hydrogen technologies. Brendon has worked with and within Māori organisations that includes establishing partnerships and joint ventures around natural resources inclusive of water, energy, forestry and dairy.

His career includes technical and commercial leadership roles with Mercury, Contact Energy, General Electric (in Mexico and the US) and the NZ Dairy Board. He is the founder of Kaitiaki Advisory Limited and holds a Bachelors of Chemical and Process Engineering and a Post Graduate Diploma in Dairy Science and Technology.

Brendon brings over a decade of governance experience inclusive of being a past Chair of Tainui Kawhia Incorporation and Tirohia landfill generation joint venture. Brendon currently holds governance roles with Hiringa Energy Limited, Tainui Kawhia Incorporation, Te Whakakitenga o Waikato, Waikato District Council – Infrastructure Committee, Manukau Institute of Technology – Runanga and government advisory panel Te Taumata Aronui.

General disclosure of interests: Director, Kaitiaki Advisory Limited; Infrastructure Committee Maangai Māori, Waikato District Council; Director, Tainui Kawhia Incorporation; Executive director, Advanced Biotech NZ; Director, Peak2Peak Limited; Waipapa Marae representative, Te Whakakitenga o Waikato; Waikato Tainui appointed member, Manukau Institute of Technology Runanga; Commercial Director ANZ, Wattstock LLC.

David Thomas

BCA (HONS)

David Thomas has over 35 years' experience in the building industry, and has led key business units within Fletcher Building for the last 25 years. He is currently the General Manager of Winstone Wallboards Ltd. David was on the founding Board of the South Auckland Crown Health Enterprise and represented Fletcher Challenge Ltd on the Board of Māori Development Corporation.

General disclosure of interests: Chair, Ngāti Whakaue Tribal Lands Incorporated; Chair, Gypsum Board Manufacturers of Australasia; Shareholder/Employee – Fletcher Building Limited; Director, New Zealand Ceiling & Drywall Supplies Limited; Chair, Altus NZ Limited, Director, Winstone Wallboards Ltd.

Hinerangi Raumati-Tu'ua

BMS, MMS, FCA, MNZM

Chair of the Audit and Risk Committee (from March 2020)
Hinerangi Raumati-Tu'ua, who is of Ngāti Mutunga and Waikato descent, is a Fellow of Chartered Accountants Australia and New Zealand. She is also a Member of the New Zealand Order of Merit for services to business and Māori. Hinerangi has significant experience in investment, financial management, and governance. She was CFO of Tainui Group Holdings Limited from 2002 to 2009 and Executive Director Operations at Te Wānanga o Aotearoa from 2010 to 2014.

General disclosure of interests: Chair, Parininihi Ki Waitotara Inc; Trustee, PKW Trust; Chair, Ngā Miro Trust; Chair, Nga Kai Tautoko Ltd; Chair, Te Kiwai Maui o Ngaruahine Ltd; Director, Taranaki Iwi Holdings Management Ltd; Director, Aotearoa Fisheries Ltd; Director, Sealord Group Ltd; Director, Port Nicholson Fisheries GP Ltd; Director, Te Puia Tapapa GP Ltd; Director, Tainui Group Holdings Ltd; Executive Member, Te Whakakitenga O Waikato and Member, Venture Taranaki.

Frances Valintine

CNZM

Frances Valintine is a futurist and thought-leader in emerging and disruptive technologies with 20 years' experience across business, technology and education. The CEO and founder of The Mind Lab and the Tech Futures Lab, she is a Companion of the New Zealand Order of Merit for services to education and the technology sector.

In 2017, Frances won the New Zealand Flying Kiwi Award and was inducted into the New Zealand Hi-Tech Hall of Fame. She is a board member of The Mind Lab and trustee of Dilworth Trust Board, and a former board member of Education New Zealand, KEA and NZTech. She is also the Futures Advisor for the BNZ Bank.

General disclosure of interests: Director and CEO, The Mind Lab Limited; Director and CEO, Tech Futures Lab Limited; Director, Harcourt Jasper Limited; Director, Pointed Tangram Limited; Director, Harper Lilley Limited; Director, On Being Bold Limited; Director, Sandell Trustees Limited; Selection Advisor, Edmund Hillary Fellowship; Trustee, Dilworth Trust Board; Futures Advisor, BNZ Bank.

Dave Chambers

Chair of the People Committee/ Te Tangata Komiti
Dave Chambers is a highly experienced business leader with a background in large-scale customer-centric organisations. He was Managing Director of Progressive Enterprises NZ and Director of Woolworths Supermarkets in Australia and has held various operations leadership roles. Previously he was a board member of the New Zealand Business and Parliament Trust.

General disclosure of interests: Director, Paper Plus New Zealand Limited.

Rob Fisher

ONZM, LLB, DIP TP

Company Secretary
Rob Fisher is a barrister who has specialised in resource management, public law and local government law. As a litigator, he appeared frequently before the Environment Court, the High Court and the Court of Appeal. In a 40-year legal career, he has provided advice and expertise to both private and public bodies, especially in the consenting of large infrastructure projects. Rob was the 2010 Barrister of the Year in the New Zealand Law Awards and was made an Officer of the New Zealand Order of Merit in the 2011 Queen's Birthday Honours. He has been a board member of NZ Rugby, Sport New Zealand and Genesis Energy.

*These disclosures were recorded as of 30 June 2020.

Left to right:
Jason Glennon, Shayne Cunis, Rebecca Chenery, Shane Morgan, Raveen Jaduram, Amanda Singleton, Marlon Bridge, Steve Webster, David Hawkins, Nigel Toms

OUR EXECUTIVE TEAM

Raveen Jaduram

BE (HONS), ME, FENGNZ

Chief Executive Officer
Raveen Jaduram has been chief executive of Watercare since 2014. He has held chief executive roles in private and public sectors in Australia and New Zealand. Raveen is a dedicated infrastructure leader, passionate about water and sustainability. He is currently on the board of the New Zealand Infrastructure Commission – Te Waihanga and Water Services Association of Australia.

Marlon Bridge

BCOM, DIP.COM, CA

Deputy Chief Executive
Marlon Bridge is a senior executive with over 25 years of experience in senior management roles across both the private and public sectors. He has been the chief financial officer of Manukau Water Limited. He has previously been the general manager of retail and chief financial officer for Watercare. He was appointed to the role of deputy chief executive in June 2020. His responsibilities as deputy chief executive include all 'business as usual' operational activities outside of the drought response management.

Amanda Singleton

BA COMMUNICATIONS

Chief Customer Officer
A passionate customer advocate, Amanda Singleton is responsible for building a customer-centric culture and overseeing all the customer touch points in the business. She has extensive experience, nationally and internationally, as a transformational corporate leader.

Rebecca Chenery

BBUS, DIP.MGMT

Chief Digital Officer
Rebecca Chenery has many years of experience in programme management and business transformation projects across the information services, telecommunications and water industries in New Zealand and overseas. Rebecca is responsible for leading all technology aspects of the business along with Watercare's business transformation programme.

Nigel Toms

MSC, ACMA, CMIRM

Acting Chief Financial Officer
Nigel Toms is a chartered management accountant and certified member of the Institute of Risk Management with over 25 years' experience in infrastructure and utility roles both in New Zealand and the United Kingdom. He was previously the head of risk and resilience for Watercare and is also a senior incident controller. He is the technical author of PAS 60518 titled "Developing and implementing enterprise risk and resilience management (ERRM) in utilities", recently published by the British Standards Institution. As acting Chief Financial Officer he holds responsibility for financial control, supply chain, property, legal, internal audit, risk and resilience functions.

Steve Webster

DIP.CM, BE (HONS), NZCE (CIVIL)

Chief Infrastructure Officer
Steve Webster is a civil engineer with more than 20 years' experience in senior leadership roles, predominantly in the infrastructure sectors in New Zealand and Australia, delivering projects and maintenance services to government, local authority and private asset owners. He was appointed Watercare's general manager – infrastructure delivery in May 2015 and appointed chief infrastructure officer in January 2018. Steve is responsible for Watercare's delivery of infrastructure projects from servicing strategies through planning to construction and for supporting external developer services to enable growth in Auckland.

David Hawkins

MPP, TTC, JP

Chief Corporate Affairs Officer
David Hawkins' responsibilities include government, community relations and communications. He has a background in sales and marketing management for New Zealand and global brands, and has a strong commitment to local government and community engagement. David has previously served as an Auckland regional councillor and is a former mayor of the Papakura District.

Jason Glennon

Chief People Officer
Jason Glennon has worked across a range of industries, including construction and fast-moving consumer goods. He has held a number of senior roles in human resources at Fonterra, Fletcher and Carter Holt Harvey.

Jason was appointed Watercare's chief people officer in January 2018. He has oversight of all people-related activities in the business and is responsible for creating a high-performing company culture.

Shane Morgan

ME (CIVIL AND RESOURCE ENGINEERING), BE (ENGINEERING SCIENCE)

Chief Operations Officer
Shane Morgan is an executive leader and water industry professional leading a team of 300 plus in the delivery of water and wastewater services. His role encompasses everything from strategy, planning, design and construction, through to commissioning and operations and a commitment to embedding a customer-centric environment that is responsive, agile and operationally excellent.

He has worked with some of the largest and most progressive Australian and New Zealand entities, leading change in diverse workplaces and developing high-performing teams and systems that are ground-breaking, sustainable and will deliver inter-generational value.

Shayne Cunis

BE CIVIL (HONS), FENGNZ, CMENGNZ

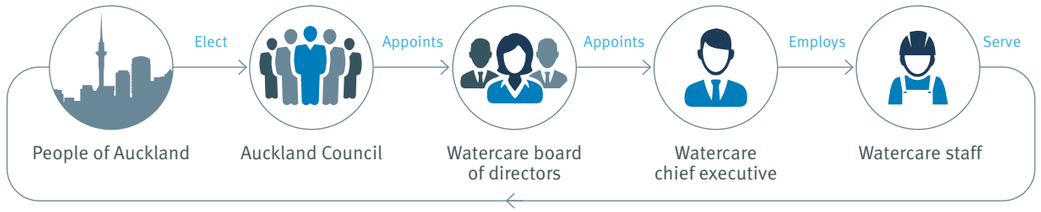
Executive Programme Director – Central Interceptor
Shayne Cunis is a chartered professional engineer and Fellow of Engineering NZ with more than 20 years' experience in the Auckland water supply industry. He was appointed the executive programme director for the Central Interceptor in January 2018 and reports to the chief executive.

Shayne has previously held senior operational management and executive roles at Watercare and has served on the board of Water New Zealand.

He is an international board member of the Water Research Foundation, which is the leading not-for-profit research cooperative that advances the science of water to protect public health and the environment.

GOVERNANCE

Watercare, a council-controlled organisation (CCO), is a wholly-owned subsidiary of Auckland Council (the shareholder). The board of directors (the board) and management are committed to ensuring that we apply best-practice governance policies and procedures. The board is ultimately responsible for all decision-making by the company.

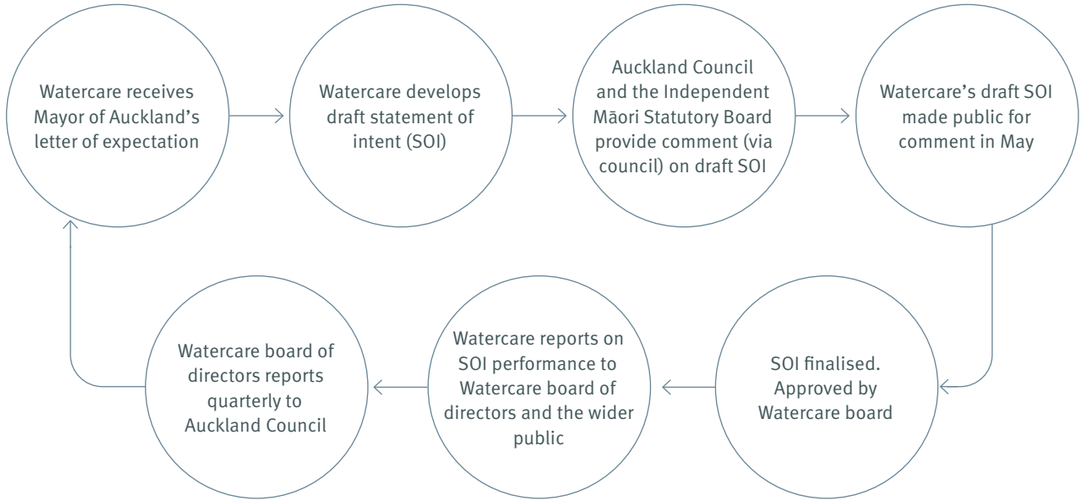


Our legislative framework

Watercare is a limited liability company registered under the Companies Act 1993, and a local government organisation under the Local Government Act 2002. Full details of the legislative framework we operate under can be found on our website.

Our governance framework

Every year, Watercare consults with its shareholder, Auckland Council, to develop a statement of intent (SOI) covering the next three years. The SOI identifies the relationship between Watercare's activity and the delivery of those outcomes sought by the Mayor of Auckland and those specified within the Auckland Plan. Auckland Council, the Independent Māori Statutory Board and the general public are invited to comment on the final draft, before it is adopted by the board. The 2019–2022 SOI is available on our website.



Performance

We have an agreed set of performance measures and targets which form the basis of our accountability for delivering on the shareholder's strategic direction, priorities and targets. This annual report records our performance against both non-financial and financial performance measures included in the SOI.

The board is independently reviewed every two to three years.

Setting standards of conduct for staff

We demand the highest standards of behaviour from our staff. Policies governing the conduct of employees are published on our intranet including the Good Employer Policy, the Discrimination, Bullying and Harassment Policy, Sensitive Expenditure Policy, Gifts and Inducement Policy and Conflict of Interest Policy.

Our projects are subject to internal probity reviews, and external probity auditors are appointed to provide additional assurance on selected projects.

Regular independent reviews

Watercare subjects its planning, operations and reporting to regular independent review. We are committed to a culture of continuous improvement and seek independent feedback from specialist advisors to achieve this objective.

Board structure and functions

The board meets at regular intervals throughout the year. The public is welcome to attend all public sessions of board meetings.

As at 30 June 2020, the board had five committees. All directors are welcome to attend any committee meetings, but only committee members have voting rights. Committees provide advice and oversight and do not have delegated authority.

- **Audit and Risk Committee**, chaired by Hinerangi Raumati-Tu'ua, helps the board fulfil its financial reporting responsibilities and provides assurance regarding compliance with internal controls, policies and procedures. The committee also helps the board exercise due care, diligence and effective overview of risk management and external reporting. Health, safety and wellness matters are the responsibility of the full board and are excluded from the duties of the Audit and Risk Committee.
- **Te Tangata Komiti (TTK)**, chaired by Dave Chambers, helps the board fulfil its wider human resources responsibilities to the company. The committee provides advice to the board on organisational capability and design, and human resource strategies, and annually reviews the chief executive's performance and remuneration framework.
- **Strategic Transformation Programme Committee (STPC)**, chaired by Brendon Green, helps the board exercise due care, diligence and effective oversight of all matters relating to the delivery of Watercare's Strategic Transformation Programme.
- **Asset Management Plan (AMP) and Major Capex Committee (AMCC)**, chaired by Nicola Crauford, helps the board exercise due care, diligence and effective oversight of all matters relating to Watercare's AMP and major projects involving capital expenditure over $100 million.
- **Committee for Climate Action (CCA),** chaired by Brendon Green, helps the board to exercise due care, diligence and effective oversight of all matters relating to the actions taken by Watercare to mitigate climate change and adapt to a changing climate by increasing our resilience.

Board member attendance 2019/20	Board	Audit and Risk	TTK	AMCC	STPC	CCA*
Number of meetings	11	5	6	4	4	2
Margaret Devlin	11	4	6	3	1	–
Nicola Crauford	11	–	1	4	4	2
Brendon Green	11	5	–	–	3	2
Catherine Harland (retired 31.10.19)	4	3	3	1	2	–
Julia Hoare**	9	5	–	4	–	–
David Thomas	10	4	5	–	–	–
Colin Magee (Board Intern) (appointed 1.1.19)	10	5	4	3	2	–
Hinerangi Raumati-Tu'ua (appointed 1.8.19)**	9	4	–	–	–	–
Dave Chambers (appointed 1.11.19)	7	1	3	2	–	1
Frances Valintine (appointed 1.11.19)	7	–	–	3	3	2

■ Denotes committee membership

* inaugural meeting on 18 February 2020

** Julia Hoare and Hinerangi Raumati-Tu'ua both chaired the Audit and Risk Committee during 2019/20.

GOVERNANCE CONT.

Integrity

Corporate governance charter

This charter defines the duties and obligations of the board and board members covering fiduciary duty, duty of care, diligence, legal and statutory duties, and conflicts of interest. It incorporates the principles of the Institute of Directors of New Zealand's Code of Practice for directors, relevant sections of New Zealand Exchange Limited's Corporate Governance Best Practice Code, and the Financial Market Authority's guide to Corporate Governance.

Whistleblowing

We have a specific policy to receive and deal with information about any serious wrongdoing within the company, as required by the Protected Disclosures Act 2000. PwC provides a Whistleblowing Disclosure Service so staff and others may confidentially and anonymously report matters of serious misconduct.

Complaints disclosure

Any complaints against the company are recorded. Targets have been set for the response to and resolution of complaints. Our level of service is reported in the annual report, to the shareholder quarterly, to the board monthly, and to the public at board meetings, as well as via our website.

Disclosures of interest

A register of directors' and senior management's interests is maintained by Watercare and is updated as and when necessary. Directors' and management's interests are a standard agenda item at every board meeting. Any disclosure of interest is recorded in the meeting minutes and the relevant participant refrains from taking part in the discussion or voting on any related resolution.

Transparency and accountability

Our financial statements, the statement of intent (SOI) and our long-term plans must be audited by the Auditor-General. The Auditor-General has appointed Brett Tomkins, using the staff and resources of Deloitte Limited, to undertake the external audit work on behalf of the Auditor-General, in accordance with the Auditor-General's Audit Standards, which incorporate New Zealand Auditing Standards. Deloitte Limited must satisfy the independence requirements of the Auditor-General and External Reporting Board.

Watercare is committed to transparent performance reporting. Recognising this, we publish:

- an annual statement of intent (SOI)
- a long-term asset management plan (AMP)
- an annual report that reports performance against the SOI and non-mandatory measures, following the Global Reporting Initiative (GRI) guidelines
- an overview of current water storage levels and other information (published weekly on our website)
- special reports and project newsletters for interested parties.

As a council-controlled organisation, Watercare is subject to the Local Government Official Information and Meetings Act 1987, which provides to the public official information held by local authorities. The average response time this year was 3.6 days.

ENTERPRISE RISK MANAGEMENT

Watercare maintains a board-approved Risk Management Policy, the intent of which is to direct the risk management function. This policy focuses risk management onto those risks that are material to the achievement of the organisation's principal objectives.

Watercare applies a risk management framework consistent with ISO 31000: 2018 Risk Management Guidelines to ensure that risks throughout the business are managed consistently.

This risk management framework defines the management policies, procedures and practices to be applied to the risk management tasks of identifying, analysing, evaluating, treating and continuing to monitor risk to provide enterprise-level information.

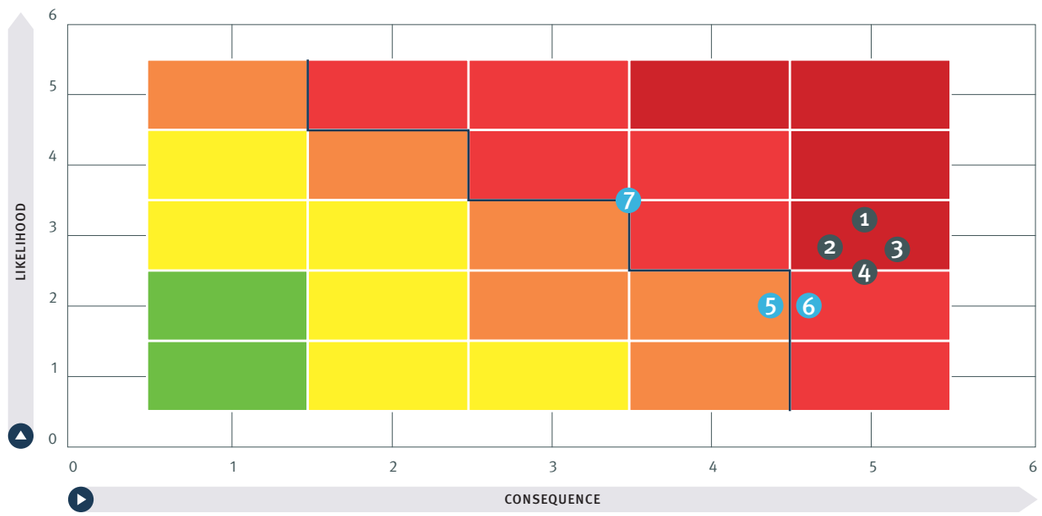
As part of the risk management framework, we have established a Risk and Resilience Steering Committee, which meets quarterly to monitor emerging risk and risk mitigation actions and strategies. The committee comprises the chief executive, senior management and the head of risk and resilience.

Regular monitoring, review and reporting of risks is an important component of the Watercare Risk Management Framework, as it ensures new risks and changes to existing risks are identified and managed, and that risk treatment plans are developed and implemented.

Significant risks are monitored by the board at least quarterly, or as required. In addition, the Audit and Risk Committee receives detailed updates on these risks.

Watercare's enterprise risks primarily reflect the dependencies that the organisation has to deliver its services and these are outlined on the heatmap below and in the table on the next page.

Enterprise risk heatmap



- 1. Failure to meet water demand due to drought, reduced or loss of supply as a result of climate change
- 2. Treasury – liquidity/capital funding risk
- 3. Major project delivery cost, price and time overrun
- 4. Significant operational hazards related to Watercare staff operation/contractor/third-party-led operations
- 5. Cyber intrusion affecting business and control systems
- 6. Failure to treat wastewater to the required standard and convey wastewater flows
- 7. Central and local government intervention

ENTERPRISE RISK MANAGEMENT CONT.

Enterprise risk description	Potential consequence	Integrated reporting capitals	Key controls and mitigation strategies
Failure to meet water demand due to drought and reduced or loss of supply *This risk is caused by extended dry weather, the loss of a major storage dam, continued delays in the application for additional raw water from the Waikato River, failure to obtain regional consents for the new Huia Water Treatment Plant or the loss of water treatment capacity which could arise from climate change (including extreme weather events) and risk of plant failure due to operating at maximum capacity for longer periods during the extended dry conditions*	Inability to supply sufficient treated water to meet Auckland's demand	• Financial capital and resources • Natural environment • People and culture • Community and stakeholder relationships	• Risk mitigation is inherent in the design of the water systems, from source to treatment • Drought incident team formed to address issues associated with continuing dry weather • Identify and develop new raw water sources • Identify, implement and monitor actions to increase production resilience • Increase the use of the Waikato River source in continuing dry weather • Integrated sources management model for water abstraction • Review and update the existing Drought Management Plan to address current challenges
Treasury – liquidity/capital funding risk *Auckland Council nears/reaches its debt limits (debt-to-revenue ratios)*	Group Constraints imposed on future planned capital project funding	• Assets and infrastructure • Financial capital and resources • Community and stakeholder relationships	• Continue to investigate alternative financing options such as Infrastructure Funding and Financing (IFF), and Shovel-Ready Projects and Water Reform Funding • Group debt position reviewed and work to support additional debt headroom continuing • Watercare will ensure that our capital programme is optimised in terms of project need, timing and cost • Agreement with Auckland Council regarding our projected capital expenditure so it can be factored into council's plans and requirements
Major project delivery cost, price and time overrun *Actual cost of delivery is higher than anticipated*	The funding requirement is outside the Asset Management Plan (AMP) envelope	• Assets and infrastructure • Financial capital and resources • People and culture • Community and stakeholder relationships • Intellectual Capital	• Develop procurement strategies that minimise capital and whole-of-life costs of new assets • Monitor and closely manage project delivery time and costs • The Central Interceptor contract has been awarded within budget • Enterprise Model including the appointment of tier 2 construction partners for delivery of capital works • Continue to monitor market trends and engage with key suppliers to ensure availability and competitive prices of stocks • Monitor supply chain vulnerability due to COVID-19 and take early action to address any potential shortfalls • Work closely with border control and immigration authorities to ensure critical personnel based overseas can be accessed to support critical project operations

Enterprise risk description	Potential consequence	Integrated reporting capitals	Key controls and mitigation strategies
Significant operational hazards related to Watercare staff operation/contractor/third-party-led operations • *Health and safety (H&S) incidents resulting from the actions of Watercare staff, contractors and/or third parties inside and outside Watercare sites and impacts of COVID-19* • *Workforce fatigue resulting from redistribution of resources to address COVID-19 and drought challenges*	Staff, contractors and/or third parties may face serious harm	• Financial capital and resources • Natural environment • People and culture • Community and stakeholder relationships	• Develop Watercare's standards for work involving significant safety hazards from operational activities, and plans to address issues that arise due to COVID-19 • Train staff to industry standards • Ongoing monitoring of relevant lead and lag H&S indicators • Continue programme of inspections and audits • Selection of contractors based on meeting Watercare's H&S requirements • Partner with contractors to ensure management of significant H&S hazards • Review and monitor contractors' H&S plans and performance
Cyber intrusion affecting business and control systems *Malicious acts compromising Watercare's corporate network or its operating (SCADA) control systems, as the cyber threat environment continues to grow*	Corporate network and/or operating control (SCADA) systems are compromised, affecting operations	• Assets and infrastructure • Financial capital and resources • Natural environment • People and culture • Community and stakeholder relationships • Intellectual capital	• Comprehensive cybersecurity policies in place • Specialist cybersecurity and detection tools deployed • Independent experts used to recommend an enhanced cybersecurity roadmap • Dedicated cybersecurity function with ongoing education of staff • Increased cybersecurity capability implemented to support working from home • Continue penetration and other testing for corporate and control networks
Failure to treat wastewater to required standard and convey wastewater flows *(including the impact of stormwater overflows in wet-weather events and longer-term climate change)* *This risk relates to environmental impacts and failure to meet consent conditions with a flow-on effect on stakeholder support and confidence*	Environmental impacts or failure to meet consent conditions that affect stakeholders	• Financial capital and resources • Natural environment • People and culture • Community and stakeholder relationships	• Non-metro wastewater treatment plant upgrade programme • Major wastewater treatment plant AMP renewal and upgrade programme • Transmission and network upgrades to convey required stormwater and wastewater flows and avoid overflows • Network upgrades to address capacity constraints • Network Inflow and Infiltration (I&I) investigations
Central and local government intervention *Governing bodies influencing Watercare's ability to operate as an integrated company*	Changes within the water industry could impact current business operating model	• Financial and capital resources • Community and stakeholder relationships • Assets and infrastructure	• Monitor development within central government and provide feedback to inform decision-making • Review the implications of and response to the proposed Water Reform Programme as it develops, in consultation with Auckland Council

ENVIRONMENTAL ADVISORY GROUP

The Environmental Advisory Group (EAG) is an independent group of individuals with interest and expertise in water and/or wastewater related topics. We advise, support and challenge Watercare's approach to sustainability generally and environmental matters in particular. We also help to anticipate emerging issues and inform strategy development. We express community concerns and press Watercare to exercise environmental leadership within the water industry.

This year we were joined by Dr Kevin Simon, associate professor in the School of Environment at the University of Auckland. Kevin brings with him an in-depth knowledge of freshwater ecosystems and multiple contributing factors to water quality from across communities and chemistry, a skill set which will be of great value to the EAG.

Water supply has been a major topic for the group during the past year. Climate change projections clearly show that extreme weather events are likely to occur with increasing frequency. Watercare's Climate Change Strategy addresses both prevention and mitigation and, based on recommendation from staff workshops, the organisation has identified a wide-ranging set of responses and is starting to implement these. Planning lead times are long, however, and climate extremes are with us already. This, together with faster-than-projected population growth, has presented an ongoing challenge and a need to advance planning for alternative means in order to build resilience into Auckland's water supply. EAG is currently engaging with this process of considering alternatives. This raises a wide variety of issues, including maintaining quality standards for public health, practicality, timeliness, financial costs and wider environmental implications.

In June 2019 EAG sent recommendations to Watercare on the Hūnua revegetation project.

This was followed by a site visit in July 2019; EAG was impressed by the knowledge and dedication of Watercare staff and the extent of successful plant establishment.

EAG supports the planting of appropriate native species, which will both optimise protection of the important Hūnua catchment and bring biodiversity and potentially carbon sequestration benefits. EAG notes that the large scale of the Hūnua project is rare in New Zealand. The project provides great opportunities for the citizens of Auckland and the rest of the country.

Our contributions in recent months have been greatly affected by COVID-19. Some topics we were intending to examine have been reprioritised as we focused on feedback to Watercare staff as they tackled the challenges of lockdown and the most severe drought in living memory. Ensuring that we citizens of Auckland have high-quality drinking water on demand and that all the water we use is safely disposed of is a hugely complex and skilled undertaking, dependent on critical day-on-day performance by the legion of Watercare employees at all levels. From our observation, these essential services have continued smoothly through the stresses of the past months.

Paul Walbran
Chairman, Environmental Advisory Group

EAG group members and areas of interest:

Paul Walbran
Chairman
Water quality, harbour health, heritage

Betsy Kettle
Zero Waste, Water Sensitive Urban Design

Daniel Hikuroa
Mātauranga, mauri, waterscapes, water futures

Elizabeth Walker
Wetlands, water, community infrastructure, Aotearoa plants

Georgina Hart
Environmental management, business sustainability, water quality, restoration and conservation, climate change

Judy Bischoff
Water, energy efficiency, soils, waste, permaculture

Madeleine Wright
Environmental litigation, national policy development

Dr Kevin Simon
Environmental science, freshwater ecology and chemistry

MANA WHENUA KAITIAKI FORUM MANAGERS GROUP

He pūtake nō tua whakarere
He whiringa o ngā aho mai i ngā tōpito i ngā tauranga
Tapuwae nuku tapuwae rangi
He nekeneke tāngata he nukunukunga o ngā aronga
Mai i ngā kāwai ki ngā uri kua heke ki ngā uri āmuri ake nei e…
E mihi ana ki te whenua e tangi ana mō te hunga kua okioki – rātou ki a rātou
Ki te hunga kua mahue mai ki muri tēnā rawa atu koe arā koutou katoa…

The 2019/20 year has seen important developments for the role of the Mana Whenua Kaitiaki Forum Managers Group (the Forum) within key water-related activities as well as the continuation of a refreshed direction into the foray of socio-environmental matters. The role and function initiated through the relationship between Mana Whenua and Watercare will continue to strengthen the dimensions of alignment to the significant water-related issues along with the opportunities across all of Watercare Services as well as the organisations within Auckland Council.

Since the 2012 inception, the Forum has maintained an operations focus through the Kaitiaki Managers Group promoting modes of efficient and effective working processes through relationships with Watercare that address the myriad issues associated with servicing the demands of population-based growth across all of Tāmaki Makaurau.

In the 2019/20 reporting period the Forum has worked with Watercare to advance work across an average of 28 projects from the following range of key groups that include but are not limited to:

- Water headworks and treatment;
- Water networks;
- Wastewater treatment plants; and
- Wastewater network projects.

Auckland's nine water storage dams have been hampered by receiving about 25 percent less rainfall than normal during this reporting period. This situation was further compounded by the ensuing summer drought conditions creating unprecedented critically-low water storage levels. We support continuous messages that encourage people to be *water wise* through these prolonged dry periods.

Then came COVID-19 where the overall well-being of people became the paramount focus at a government as well as a personal level. *Working from home* took on a completely different meaning for many, including the Forum, in the quest to minimise risks of virus transmission by applying *virtual connect technology*.

In conclusion we acknowledge the continued support from Watercare Services that enables the Mana Whenua Kaitiaki Forum (Managers Group) to give effect to focused good ecosystems management.

Kāti ki konei, ka puta ka ora e…

Tame te Rangi
Chair, Mana Whenua Kaitiaki Forum

Mana Whenua Kaitiaki Forum:

Makaurau Marae Māori Trust
Ngā Maunga Whakahii o Kaipara Trust
Ngāi Tai Ki Tāmaki Tribal Trust
Ngāti Manuhiri Settlement Trust
Ngāti Maru Rūnanga Incorporated
Ngāti Rēhua – Ngāti Wai ki Aotea Trust
Ngāti Tamaoho Trust
Ngāti Paoa Iwi Trust
Ngāti Tamaterā Settlement Trust
Ngāti Wai Trust Board
Ngāti Whanaunga Incorporated
Ngāti Whātua Ōrākei Trust
Te Ākitai Waiohua Iwi Authority
Te Ara Rangatū o Te Iwi o Ngāti Te Ata Waiohua
Te Kawerau Iwi Tribal Authority
Te Patukirikiri Incorporated
Te Rūnanga o Ngāti Whātua
Te Uri o Hau Settlement Trust
Te Whakakitenga o Waikato Incorporated

STAKEHOLDER AND MATERIALITY

Reporting on what's important to our stakeholders and our business is the basis for this integrated annual report. It is structured around the material customer, business, environmental, social and governance topics that stakeholders and Watercare identified as most relevant in 2019/20.

These are the key issues that have a material impact on the long-term success of our business and our wider operating environment. Other than the significant impacts from the drought and COVID-19, these issues broadly remain the same as reported in our 2019 Annual Report.

Climate change continues to be material to Watercare as it has a huge potential to impact our operations and services, and has significantly influenced our decision-making in 2019/20.

Watercare is accountable to a wide range of stakeholders, which comprise the entities or individuals that can affect or be affected by the organisation's activities. We have a structured process of engagement with many of our stakeholders. Media enquiries, complaints and other public interaction have also helped us to understand stakeholders' expectations. The issues that were considered important by our stakeholders during the year are set out on the next page.

Key issues

- Drought
- COVID-19
- Climate change
- Safe, clean, reliable drinking water
- Health, safety and well-being of our people
- Responsible infrastructure stewardship
- Infrastructure planning for future growth
- Effective wastewater management
- Long-term financial stability

The ongoing drought and COVID-19 have affected each of the stakeholder groups below so these two issues are common to all of our stakeholder groups. Apart from these, the issues that relate to the individual stakeholder groups are:

Auckland Council

- Climate change
- Promoting Māori outcomes
- Water and wastewater investment
- Progress on Central Interceptor project
- Investigating commercial opportunities and funding.

Regulators

- Involvement and contribution to Department of Internal Affairs' review of 'three waters'
- Proposed central government reform to the water industry.

Environmental groups

- Early involvement in Watercare's programmes
- Watercare's climate change strategy and action
- Environmental management of the Central Interceptor project
- Hūnua revegetation programme.

Residential and commercial customers

- Responsiveness to issues (billing, faults)
- Affordability of services
- Impact of stage 1 water restrictions on businesses
- Water efficiency (for businesses) in order to reduce their operational costs.

Developers

- Delivery of the Auckland Housing Programme and wider support to the Government's major urban transformation programmes in the region
- Coordinating and delivering infrastructure to service new growth areas in Auckland
- Upgrading the local water and wastewater network to cater for growth in existing areas.

Tangata whenua (Māori)

- Healthy waters (Te Mauri o Te Wai)
- Climate change
- Wastewater discharge consents and projects that require engagement with Mana Whenua such as the Central Interceptor project and South-West Wastewater Servicing Strategy.

Local Boards

- Information on infrastructure projects ahead of works and updates on progress and delays
- Timely information on local network issues so there are 'no surprises'.

Local residents and community groups that neighbour our worksites

- Opportunities for consultation on projects before work begins
- Accurate and timely information on projects' progress
- Consideration for the social and environmental impacts of our projects, e.g. traffic management and access to property.

Infrastructure providers

- Coordinated approach to infrastructure projects to minimise disruption to the community
- Opportunities to collaborate and deliver infrastructure effectively.

Suppliers and contractors

- Access to information on planned and upcoming projects
- Opportunities for innovation and collaboration.

Staff

- Better alignment between departments on strategy and activities
- Competitive pay.