UrbanUtilities

OUR WATER WAY

WATER LEADERSHIP PLAN

ABOUT OUR WATER WAY

Our Water Way is Urban Utilities' Water Leadership Plan, which details our approach to delivering reliable, sustainable and affordable water and wastewater services into the future.

***Our Water Way* describes:**

- The role we perform in delivering on the liveability needs of our communities.
- The challenges and opportunities we are facing now and in the future.
- The future we are working towards to overcome these challenges, and the steps we are taking now to get there.
- What our people and the communities we serve can expect as we move forward.

ACKNOWLEDGEMENT OF COUNTRY

We acknowledge the Traditional Owners of the lands on which we operate and recognise their continuing connection to land, waters and community. We pay our respects to them and their cultures, and to elders both past and present.

CONTENTS

ABOUT OUR WATER WAY 2

A MESSAGE FROM OUR CHAIR 6

WE ARE URBAN UTILITIES 8

Our earliest water stewards 8

The community we serve today 8

Our purpose, vision and aspirational outcomes 9

OUR ROLE IN ENRICHING OUR COMMUNITIES 10

A liveable community 10

Our evolving role in liveabilty 10

Keeping our prices stable, affordable and fair 10

Protecting public health 11

Enhancing our natural ecosystems 11

Helping shape our communities 11

HELPING CUSTOMERS IN HARDSHIP: RICHARD'S STORY 12

PLANNING FOR A SUSTAINABLE WATER FUTURE 14

Caring for the water we have today 14

Creating the water we need for the future 14

Working with Seqwater to support the region's water security program 15

OUR ENVIRONMENTAL FOOTPRINT 16

The impact of our water supply 16

The impact of our wastewater collection and treatment 16

Taking an environmental leadership role 16

Why is the Brisbane River brown? 17

THE WORLD'S BEST OYSTERS RIGHT HERE IN THE BAY: WADE'S STORY 18

CASE STUDY: ENHANCING OUR COMMUNITIES THROUGH RECYCLED WATER 20

WHAT MAKES WATER WORTH PAYING FOR? 22

Capturing and storing water 22

Making water safe to drink 23

Available at the turn of a tap 23

Collected at the pull of a plug and the push of a button 23

When the troughs run dry 23

THE CHALLENGES AND OPPORTUNITIES AHEAD 24

A growing population 24

The impacts of a changing climate 24

Supporting and enhancing a healthy ecosystem 24

Innovation and rapid technology change 25

Affordable cost of living 25

The workforce of the future 25

2032: THE YEAR OF NET ZERO & THE OLYMPIC AND PARALYMPIC GAMES 26

Committing to Net Zero 26

Preparing for the 2032 Olympic and Paralympic Games 27

THE CHANGING SHAPE OF OUR COMMUNITIES 28

Cooling our warmer cities 29

OUR WAY FORWARD 30

WHAT THIS MEANS FOR OUR CUSTOMERS AND COMMUNITIES 33

An abundance of affordable water to meet our liveability needs 33

Continually improving our environment and ecosystems 33

More water and resources for agriculture and industry 33

THE STEPS WE ARE TAKING TODAY 34

Getting more out of what we have today 37

Keeping water closer to home 38

Earning and maintaining the trust of our wider community 41

Making better decisions together (Cannery Creek) 42

Setting ourselves up for success 44

Staying connected with us 46

WELCOME

Water is at the heart of our much-loved lifestyle in South East Queensland. Our quality of life – our jobs, businesses and our communities – depends on it.

We all have a role to play in protecting and enhancing our waterways to ensure they continue to support the health and liveability of our communities as they grow and evolve for future generations.

At Urban Utilities, we play an important role in shaping the future of water for our customers and communities, as demonstrated through this Water Leadership Plan. Our plan works in coordination with Seqwater's Water Security Program for the region, and we'll continue to work closely with them to plan for the future.

Our Water Way describes the future we are shaping, the challenges we are facing, and the steps we are taking to fulfil our valued role of enhancing the liveability of our communities and ensuring water security for years to come.

South East Queensland's increasingly variable climate has highlighted the importance of having a diverse mix of water sources to ensure water security for our region, whatever the weather. This includes climate-independent water sources, such as desalination, as well as purified recycled water, which is already used around the world.

With Brisbane hosting the 2032 Olympic and Paralympic Games, it is vital that we put water security at the forefront of our planning. Already, we are passionately exploring opportunities to design and build innovative and sustainable water and wastewater infrastructure for the key Olympic and Paralympic precincts that will form part of our network.

I encourage our customers and communities to stay involved and share their expectations with us. We look forward to taking a collaborative approach to shaping a resilient, sustainable and thriving water future for our region.

Chris Bulloch
Executive Leader Integrated Solutions

WE ARE URBAN UTILITIES

OUR EARLIEST WATER STEWARDS

Prior to European settlement, the traditional owners of the land, the First Peoples of Australia, nurtured and cared for our waterways. Water holds spiritual and cultural significance to First Australians, with its influence reflected in the many traditional stories, histories, place names and terminologies that are in use to this day.

We acknowledge the First Peoples, the keepers of these stories and the first stewards of our waterways, and their continued connection to the lands, waters and communities that make up our region.

THE COMMUNITY WE SERVE TODAY

Urban Utilities is responsible for delivering drinking water, recycled water and wastewater services to the growing communities of Brisbane, Ipswich, Lockyer Valley, Somerset and Scenic Rim. We also operate the SAS Laboratory, which is responsible for providing water sampling services and chemical and microbiological analysis to a range of industries.

While our head office is located in Fortitude Valley, Brisbane, our employees work across all our regions, including SAS Laboratory in Darra, field-based depots in Eagle Farm, Acacia Ridge and Bundamba, and our wastewater treatment plants located across our region.

Urban Utilities operates as a Statutory Authority established under the *Water Supply Act 2009,* with the Brisbane City Council, Ipswich City Council, Lockyer Valley Regional Council, Scenic Rim Regional Council and Somerset Regional Council as participant shareholders.

Since our formation in 2010, our role as a water and wastewater service provider has evolved. We now play a greater role in supporting the broader aspirations of our communities. This is reflected in our purpose, vision and aspirational outcomes.

OUR 2032 ASPIRATIONAL OUTCOMES

CHANGE:
OUR WORLD IS RAPIDLY CHANGING. THIS MEANS WE MUST CHANGE

EMPLOYEE:
URBAN UTILITIES IS THE MOST DESIRABLE PLACE TO WORK IN AUSTRALIA

CUSTOMER:
URBAN UTILITIES IS THE MOST TRUSTED PROVIDER IN AUSTRALIA

COMMUNITY:
OUR COMMUNITIES ARE THE MOST LIVEABLE IN AUSTRALIA

ENVIRONMENT:
OUR NATURAL ECOSYSTEMS ARE CLEAN, VIBRANT AND RESILIENT FOR FUTURE GENERATIONS

GROWTH:
WE PURSUE OPPORTUNITIES WHERE WE ARE UNIQUELY PLACED TO CREATE AND GROW VALUE

OLYMPICS:
THE 2032 OLYMPIC AND PARALYMPIC GAMES

OUR PURPOSE

Enrich quality of life.

OUR VISION

We play a valued role in enhancing the liveability of our communities.

OUR ROLE IN ENRICHING OUR COMMUNITIES

A LIVEABLE COMMUNITY

Urban Utilities' vision is to play a valued role in enhancing the liveability of our communities.

Put simply, a liveable community is a great place to live. It is a community that:

- Meets the social, environmental and economic needs of its people.
- Addresses the values and preferences that its people place on wellbeing, amenity, belonging and a sense of place.
- Considers the needs of both present and future generations in how it responds to challenges and trends that may arise.

Supporting these liveability needs are a range of service providers, including health, education, transport, energy, and Urban Utilities' water and wastewater services.

OUR EVOLVING ROLE IN LIVEABILITY

The water and wastewater services that Urban Utilities provides are fundamental in supporting the liveability needs of our communities. Through these services, we are performing our critical role in:

- Protecting public health by providing access to clean drinking water and wastewater services.
- Enhancing and preserving our natural land and water ecosystems through the collection and safe management of wastewater.
- Helping to shape the way our cities and regions are planned and developed.

We recognise that what matters most to our communities evolves over time. To meet these needs, we too must continue to adapt and improve both what we do, and how we do it.

KEEPING OUR PRICES STABLE, AFFORDABLE AND FAIR

Urban Utilities recognises that the affordability of our services, as part of the overall cost of living and doing business, is a key liveability need that our communities expect of us.

We are committed to continually improving the way we perform our role to maintain downward pressure on our costs and keeping the prices and tariffs that we need to charge our customers fair and equitable.

Despite these efforts, we know there will be people in our community in financial hardship that cannot afford the price of our services. We are committed to offering a range of assistance options for such customers, including payment extensions and flexible payment plans.

PROTECTING PUBLIC HEALTH

Water service providers like Urban Utilities were born out of the need for safe drinking water and reliable wastewater services. The health, growth and prosperity of our region depend on these services, with Urban Utilities and its predecessors delivering these services for more than 100 years.

What we do

Urban Utilities is responsible for delivering treated drinking water and wastewater services to our customers. We also treat commercial and industrial trade wastes, and provide recycled water. We do this through operating pipes, pumps, reservoirs and wastewater treatment plants, and by responding to issues such as pipe bursts and blockages in a timely manner to ensure our Customer Service Standards are met.

ENHANCING OUR NATURAL ECOSYSTEMS

Our natural environment is integral to our lifestyle and economy. This includes the flora and fauna found in the forests, waterways and coastlines we – and our visitors – rely on for our amenity and recreation, as well as the agricultural land used for farming and food production. Through our role in a circular economy, we recover resources, such as water, nutrients and energy, out of the wastewater we collect and manage.

What we do

Urban Utilities treats and disposes of contaminants harmful to human health and the environment, and recovers useful resources from household wastewater and commercial and industrial trade wastes. Urban Utilities is one of many organisations that influence the health of environment, in particular the health of the Brisbane River and Moreton Bay.

HELPING SHAPE OUR COMMUNITIES

Water continues to be central to our way of life and how our cities, towns and regions grow and develop. The services we provide are part of an array of other services, such as energy and transport, that must be planned and coordinated to best meet the liveability needs of our communities.

What we do

Urban Utilities provides new land developments with access to our water and wastewater services. Working closely with others, we influence where and how these developments occur, encouraging water sensitive and cost-effective planning approaches that help keep downward pressure on our prices.

HELPING CUSTOMERS IN HARDSHIP: RICHARD'S STORY

Getting behind on bills can happen to anyone. Life has a habit of throwing up curveballs and situations can change in the blink of an eye.

For Brisbane homeowner Richard Machinka (pictured left), the curveball was when he had to give up work to become a full-time carer for his mum.

"Mum and I were so stressed at one point, I didn't know what to do. I was caring for her and she got sick and had to go to the hospital, and I didn't realise how far behind we were with our bills," he said.

Richard contemplated asking a mate for the money but instead picked up the phone and asked for assistance.

Karen Hughes was the voice on the other end of the line. She's from our Customer Care team and has helped hundreds of customers to look at options to assist with paying their bills.

"Richard was like a lot of our customers, especially the ones experiencing financial difficulty for the first time, in that they can find it frightening to pick up the phone and call us," said Karen.

"Our customers can be embarrassed, ashamed, in denial or simply burying their head in the sand and hoping it will all just go away. A lot of the time, they may have had an unpleasant conversation with other organisations and they prejudge and think Urban Utilities is going to react the same way, when that's simply not the case."

Karen says Richard was quite taken aback after speaking to her, as it wasn't as difficult to set up a payment arrangement as he thought it was going to be.

"You guys have been so good to us," said Richard.

"My mum, when she was still living here, loved dealing with you guys. From the first time we rang up, Karen was so friendly, and she has always let me pay at my own pace."

"Now I put a bit away each week and, by the time the bill comes, it's already paid. I owe less than a hundred dollars and I'll be paying that off in the next few weeks. I can water the plants when they need it without having to worry now."

"We want our customers to know we are here and that we can help them," said Karen.

"So please, if you're having trouble paying your bill due for any reason, don't worry, just get in touch with us. We'll listen, we'll work with you, and we'll hopefully avoid a situation where one overdue bill becomes multiple overdue bills."

For more on our assistance programs, including UrbanAssist, visit urbanutilities.com.au or take a page out of Richard's book, and call us to discuss your circumstances.


AUTO REPAIR
QUALITY PARTS
VINTAGE SUPPLY
65

PLANNING FOR A SUSTAINABLE WATER FUTURE

At Urban Utilities, we're always planning well ahead to ensure our drinking water is secure, affordable and plentiful for our region for generations to come. We're also working to help everyone understand what this involves.

Our plan for water security is about c**aring for the water we have today** and **creating the water we need for the future.**

CARING FOR THE WATER WE HAVE TODAY

Caring for the water we have today involves always using water efficiently in our homes and businesses and encouraging waterwise behaviours in our communities. Each of us has a role to play in looking after our drinking water, and with many South East Queenslanders having lived through the Millennium Drought, we already know how to be water savers.

Whatever the weather, we encourage everyone to look for ways to use water efficiently and minimise wasted water around their homes and businesses, from taking shorter showers and using the half flush on the toilet, to choosing waterwise plants and using a pool cover to reduce evaporation.

CREATING THE WATER WE NEED FOR THE FUTURE

Rainfall in our dam catchments and waterways is one of many ways we can get drinking water. As our climate continues to change, and rainfall becomes less regular and predictable, we need to increase our water reuse and look to other more resilient sources of water from which we can 'create' drinking water.

To achieve this, Urban Utilities is focused on:

Increasing water reuse – By increasing our use of recycled water for industry, agriculture and irrigation, we're easing pressure on our drinking water supplies, reducing nutrient emissions to waterways and delivering benefits for our customers and communities.

We're using recycled water on site at many of our wastewater treatment plants and supplying recycled water to customers across our service region (see page 20).

Keeping our water closer to home – Today, the biggest cost of providing our services is associated with the cost of our assets – the breadth, structure and location of which was decided on many decades ago. At the time, these decisions were based on the best information available, which called for an extensive collection of pipes and pumps to move water and wastewater vast distances to and from large centralised treatment facilities.

Going forward, and with the help of continual advances in technology and science, we're progressively managing, re-using and recycling water closer to where it is used and collected. This is a big part of our plan to 'reshape' the water cycle to deliver more resilient and cost-effective services (see page 30). This approach is already in practice in leading cities and regions around the world, including in Canada, Singapore, Japan, the United Kingdom and the United States.

To supplement the region's water sources, Seqwater is focused on:

Desalination – Our region has Seqwater's Gold Coast Desalination Plant, which turns seawater into drinking water. The plant has been in continuous operation since it was first brought online in 2009, and at full capacity, it can supply enough water for about 300,000 homes every day or 15 per cent of the region's water supply.

Purified Recycled Water – The Western Corridor Recycled Water Scheme was built during the Millennium Drought to provide purified recycled water when we need it. The Scheme is currently supplying purified recycled water to industry and power stations and can be used to supplement drinking water storages by topping up Lake Wivenhoe in the future, when needed. This water source is safe and is already used around the world, including in Perth, Singapore and London.

WORKING WITH SEQWATER TO SUPPORT THE REGION'S WATER SECURITY PROGRAM

Seqwater is the region's bulk water supply authority responsible for sourcing, storing, treating and supplying bulk drinking water. At Urban Utilities, we supply this treated drinking water via our network of pipes, pumps and reservoirs to our customers' homes and taps, and we also take away and treat wastewater.

We work with Seqwater and other water service providers across South East Queensland to plan and manage our networks so we have safe, reliable and affordable water to maintain the lifestyle, jobs and liveability we have come to expect in our region.

Urban Utilities' Water Leadership Plan, *Our Water Way,* works in coordination with Seqwater's *Water Security Program,* which is the authority's plan for providing the region's drinking water over the next 30 years.

Under Seqwater's *Water Security Program,* dams will continue to be the major drinking water source in South East Queensland – but dams can only store water if it rains when and where we need it. Our region already has access to climate-independent infrastructure built during the Millennium Drought and it makes sense to use this to support the region's water security. This infrastructure will help to safeguard our water supply when we can't rely on the rain.

OUR ENVIRONMENTAL FOOTPRINT

Our waterways connect us from land to sea, joining the waters in our creeks and streams hundreds of kilometres inland through to Moreton Bay and the Pacific Ocean. The health of the land, our rivers, streams, and the Bay they connect to is crucial for the health and wellbeing of our environment, our community and our economy.

THE IMPACT OF OUR WATER SUPPLY

Most of our region's drinking water supply is sourced and treated from dams and weirs that have been built within our waterways to collect and store water as part of a "catchment-to-sea" model. This model has served us well throughout our region's history; however, it has always been reliant on rainfall – when and where we need it, and in quantities that we can safely manage.

Dams and weirs significantly modify the way water would naturally move through our waterways and catchments. This impact can be particularly significant in times of drought, where creeks and rivers may run dry, damaging nearby ecosystems and agricultural production that relies on the waterways for habitat and water.

In more modern times, we now have alternative sources of water, such as desalination and purified recycled water to top up our supplies during periods of low rainfall. With our drinking water supplies under pressure from population growth and climate change, we need to do more to secure our water future.

THE IMPACT OF OUR WASTEWATER COLLECTION AND TREATMENT

Our early wastewater systems from the 1920s were developed when human health, rather than environmental health, was the primary concern. They were designed to simply collect wastewater from our towns and cities and direct it, largely untreated, to our waterways. Natural processes within our waterways would then breakdown the various nutrients and contaminants.

As our population boomed, these natural processes could no longer keep up, with the poor quality of the environment becoming a human health concern itself.

Through the 1970s, a greater focus was placed on the value of waterways and the environment, leading to a better understanding of how treatment processes could be improved. As such, new wastewater treatment plants were built across the region to treat the majority of wastewater that would otherwise have entered the waterways.

The implementation of new treatment technologies at wastewater treatment plants from the early 2000s supported further reductions in the amount of nutrients and contaminants entering our waterways from wastewater. This is despite the significant growth in our population and the volume of wastewater needing to be treated.

The improved water quality in our waterways continues to support the recovery and regeneration of marine habitats, vital to the continued health of our environment, and the community and economy it supports.

TAKING AN ENVIRONMENTAL LEADERSHIP ROLE

Urban Utilities is continually improving our understanding of the impact our communities have on our environment. Through this understanding, we are working to make a more effective and positive difference beyond our traditional wastewater treatment role.

Examples of this work includes:

- Our programs to rehabilitate and revegetate river and stream banks, such as Laidley Creek, to reduce soil erosion into our waterways.
- Supplying recycled water to our communities for irrigation, agriculture and industry, including a four-hectare blue gum plantation in the Lockyer Valley (pictured right).
- Supporting research into Australia's first seaweed farm to help naturally manage nutrients entering Moreton Bay.

WHY IS THE BRISBANE RIVER BROWN?

Many of our region's creeks and waterways feed the Brisbane River, which winds its way through our regions, the City of Brisbane, and onto Moreton Bay.

Colloquially known as 'the brown snake', the Brisbane River is famous for its murky, mud-like colour. The cause of this colour is from 'suspended sediments', dirt and mineral particles within the water that take long periods of time to settle out onto the riverbed.

The growth in population, urbanisation and industry have increased the amount of sediments that enter the Brisbane River. This is a result of the clearing of vegetation that has left many areas prone to erosion during heavy rainfall.

As a tidal estuary, the incoming tides mix with the river flows, further preventing the suspended sediments from settling. Dredging of the Brisbane River to support the movement of ships crucial to trade exacerbates this tidal influence.

While not just impacting the aesthetics of our environment, suspended sediments from our waterways progressively contribute to the mud on the seabeds and coastal surrounds of Moreton Bay. This mud threatens the health and balance of our marine environments that we rely on for our tourism, recreation and seafood industries.

Urban Utilities will continue to work with our partners to help reduce the impact of erosion on the river. Based on collective efforts to date, the quality of the water has improved significantly.

THE WORLD'S BEST OYSTERS RIGHT HERE IN THE BAY: WADE'S STORY

WADE MCFADGEN

Moreton Bay Rock Oysters

"I've been out farming oysters off Moreton Island for over 20 years. A lot of people don't realise the oysters they get in some of the best restaurants in town are actually grown locally.

My oysters got served up to world leaders at the Brisbane G20 meeting back in 2014, which was pretty special.

We have over three million oysters out there at any one time. I handle every oyster every three months at a minimum. They are graded and rebagged every three months. It's very labour-intensive, but I love what I do.

We have such a huge market across Australia, being in Brisbane, and we're trying to get more people eating them – they have as much protein as chicken and are a lot better for the environment.

Oysters are good for the health of the bay; they consume a lot of the nutrients in the water as they grow.

The biggest risk we have is the health of the bay; an oyster is only as good as the water they're grown in. We've seen other oyster-growing areas like Port Stephens and Hawkesbury River have a tough time in the past because of their water.

We had a bit of a scare back with the floods in 2011, the dirty water coming out of the Brisbane River almost made it out this far.

Over the years though, I've seen the water quality gradually get better, with more fish, dugongs and turtles around compared to when I first started."

CASE STUDY: ENHANCING OUR COMMUNITIES THROUGH RECYCLED WATER

Urban Utilities is helping drought-proof one of Queensland's most popular country racing destinations by supplying it with recycled water.

In early 2021, when the South East was experiencing prolonged drought conditions, Urban Utilities was diverting an average of 330,000 litres of recycled water to the club every day.

Recycled water is wastewater that has been highly treated so it can be re-used on golf courses, sporting fields or, in this case, to keep the historic Kilcoy racecourse lush and green in even the harshest weather conditions. It's a win/win because it delivers benefits for our community and the environment by protecting precious drinking water supplies and reducing nutrients in local waterways.

Kilcoy Race Club's track is irrigated with treated recycled water, which is nutrient-rich and makes for excellent fertiliser.

Veteran Kilcoy Race Club president Con Searle (pictured) said the partnership with Urban Utilities to supply recycled water really helped them cut costs at a crucial time.

"If we didn't have the recycled water, especially after being hit hard by COVID-19 and the drought, we would not have had a track at such high standard, there is no way in the world," he said.

Mr Searle said he planned to hand over the reins as club president in years to come and that using recycled water was a legacy he was happy to leave behind.

"Urban Utilities' recycled water has put Kilcoy on the map, it's as simple as that, and it will help us ensure the club continues to prosper for years to come," he said.

We're also using recycled water to irrigate a plantation of 1,600 blue gum trees – a preferred food source of the koala – that we planted on land adjoining our Helidon Wastewater Treatment Plant.

Using this nutrient-rich source of water has helped the trees thrive. Once mature, the plantation will be a valuable habitat for koalas, as well as other native wildlife.

Recycled water is also used to irrigate farms and nurseries as well as for activities such as construction and dust suppression.


TAB

WHAT MAKES OUR WATER WORTH PAYING FOR?

There's a common misconception that, if water falls from the sky, why should people have to pay for it?

While water does fall free from the sky, it does not always fall when we need it, where we need it, and in the right quantities and quality to meet our liveability needs. When you pay for water from Urban Utilities, you are paying for water you can trust to be clean and safe to drink. It is also delivered out of every tap in your home or business, whenever you need it, at any time of day, all for less than one cent per litre.

CAPTURING AND STORING WATER

South East Queensland is fortunate to have one of the most liveable climates in Australia, with each year typically having many more clear and sunny days than rainy days. This means, however, that when it does rain, we need to be ready to safely capture and store part of the rainfall that runs off into our creeks and waterways so we have enough water all year round. This is achieved through dams and weirs located around our region, operated and maintained by Seqwater, with the largest storage, Wivenhoe Dam, being able to hold over 1,000 billion litres of water – equivalent to over 450,000 Olympic swimming pools.

Despite their size, it sometimes doesn't rain enough to keep our storages full, and our water supplies can be supplemented with water from other sources, such as treated sea water from Desalination Plants and purified recycled water from Advanced Water Treatment Plants.

MAKING WATER SAFE TO DRINK

The rainfall that is captured in our dams and weirs is not safe to drink without being treated first.

When rain falls and runs off into our creeks and streams, it can mix with soils and other substances, including microscopic organisms, that can cause illness and diseases in humans.

Before the water gets to the tap, it is first treated at water treatment plants through several processes to remove contaminants and is then disinfected, making it safe to drink. Similarly, sea water needs to be treated at desalination plants to remove the salt and other contaminants before it is safe to drink.

READILY AVAILABLE AT THE TURN OF A TAP

From the water treatment plant, drinking water needs to be moved under pressure hundreds of kilometres, constantly ready to be used at almost every tap in our region. This involves building, operating and maintaining a network of thousands of kilometres of water pipes and other assets, such as pumps, water towers and reservoirs. We continually monitor and analyse the quality of the water as it moves through the network to make sure it stays safe to drink throughout its journey.

The number of pipes and pumps we need to build, operate and maintain for our communities depends on how our communities and their liveability needs grow and evolve. We need to build longer pipes to provide services to new low-density suburbs, while higher density developments in existing areas can often be served on our existing network.

COLLECTED AT THE PULL OF A PLUG AND THE PUSH OF A BUTTON

Just as we deliver water to almost every tap in our region, so too do we collect wastewater and other liquid wastes from almost every kitchen sink, toilet, bathroom and factory.

Just like water, this wastewater needs to be transported a long distance through a large amount of infrastructure, before being safely treated at our wastewater treatment plants and discharged to our waterways.

This wastewater network needs to be well maintained to prevent blockages and overflows, while the treatment plants require a significant amount of chemicals and electricity to make the water safe for the environment.

WHEN THE TROUGHS RUN DRY

Many people living in our rural areas know all too well the importance of a safe, reliable and constant water supply.

In many rural areas, away from the water networks in our towns and cities, people supply their homes and farms with water using their own tanks and dams to collect and store rainwater.

During periods of low rainfall and drought, the water levels in these tanks and dams can fall. To refill these storages, residents and farmers need to get water delivered from other sources, often having to pay for water to be delivered by truck or making frequent trips themselves to pick up water from Urban Utilities' filling stations located in and around our towns.

THE CHALLENGES AND OPPORTUNITIES AHEAD

Through understanding the challenges and opportunities our communities may face in the future, we can better prepare, respond and adapt the way we operate to continue fulfilling the liveability needs of our community.

A GROWING POPULATION

The population of our region is expected to grow by two million people over the next 25 years, requiring 30,000 new dwellings per year.

- Increased demand for services, including water and wastewater, placing pressure on existing assets and requiring investment in new infrastructure.
- Greater demand for access to waterways and high-quality green spaces for recreation and amenity due to an increase in high-density living.
- Encroachment on areas used for our treatment operations, requiring us to adapt the way we work.

THE IMPACTS OF A CHANGING CLIMATE

The world is getting warmer, with weather and climate patterns becoming increasingly unpredictable.

- Extreme weather events, such as floods, lightening and storms, can impact communities and infrastructure.
- Drought and high temperatures can affect the availability and quality of drinking water.
- Rising sea levels and storm surges may impact low-lying and coastal areas.
- Pressure on our ecosystem's ability to manage the impacts of a growing population.

SUPPORTING AND ENHANCING A HEALTHY ECOSYSTEM

A healthy ecosystem is not only critical to our mental and physical wellbeing, but also to our economic prosperity.

- An increased need to identify, treat and dispose of new types of wastes.
- Demand for clean and safe water for recreation.
- Greater needs for a water system to provide appropriate water flows for food and agriculture.
- Opportunities to turn collected wastewater and industrial wastes into valuable and sustainable resources.

INNOVATION AND RAPID TECHNOLOGY CHANGE

Technology is becoming smarter, cheaper and more autonomous, enabling both new ways of working and new ways of providing our services.

- New technologies may enable more efficient ways of working but will require our workforce to develop and diversify their skills.
- Improvements in small and micro-scale water treatment technologies may encourage our commercial customers to go off-grid, impacting our costs and prices.
- A greater social demand to further increase transparency in our data and decision making, while also respecting the privacy of our customers.

AFFORDABLE COST OF LIVING

The price of water and wastewater services, like many other essential services, contributes to the overall cost of living and doing business in our region.

- Cost of living pressures could increase the number of residential customers having difficulty paying their essential bills, including for their water and wastewater services.
- Increases in operating costs could impact the ability for businesses and community groups to afford the services they need, including water and wastewater.
- Potential impacts on water-dependent businesses and recreational areas, such as such as parks, sports fields and golf courses, if they reduce their water usage to manage their costs.

THE WORKFORCE OF THE FUTURE

An organisation cannot run without its people. The work that needs to be done, the skills, knowledge and technology to do it is continuously changing.

- Challenges in recruiting and retaining key employees in high-demand fields.
- Greater demand to capture the skills and knowledge of retiring employees and pass it on to the next generation.
- New working arrangements, such as the gig economy, changing expectations for how people are employed.

2032: THE YEAR OF NET ZERO & THE OLYMPIC AND PARALYMPIC GAMES

At Urban Utilities, we have set ourselves some crucial goals to achieve by 2032. These include realising Net Zero greenhouse gas emissions and delivering innovative and sustainable infrastructure in readiness for the Olympic and Paralympic Games and beyond.

COMMITTING TO NET ZERO

With climate change putting pressure on water supplies around the world, it's important we play our part to reduce our carbon emissions from delivering essential water and wastewater services.

All industries and businesses have a role to play and many water utilities around the world have committed to reducing their carbon emissions as part of the United Nations Race to Net Zero.

At Urban Utilities, we've committed to reaching Net Zero greenhouse gas emissions by the time Brisbane hosts the 2032 Olympic and Paralympic Games.

To help us deliver on this commitment, we will focus on:

- **Improving energy efficiency** – We're always looking for new and better ways to improve our energy efficiency, as wastewater treatment is traditionally an energy intensive process. We've recently introduced the Australian-first anammox biological treatment process at Brisbane's largest wastewater treatment plant, which has reduced our energy use.
- **Increasing our use of renewable energy** – We'll increase our use of renewable energy to 100 per cent by 2032 and continue to generate our own clean energy from wastewater. In fact, since we were formed in 2010, we've doubled the amount of clean power we're producing each year from wastewater.
- **Further investing in local offset projects** – We're also planning to invest in local offset projects by rehabilitating up to 5,000 hectares of land in our service region.

PREPARING FOR THE 2032 OLYMPIC AND PARALYMPIC GAMES

Just as we achieve our Net Zero aspiration, our region will host the 2032 Olympic and Paralympic Games – the first in history to operate as 'climate positive'.

For Urban Utilities, the Olympic and Paralympic Games is a once-in-a-generation opportunity to accelerate our long-term infrastructure plans and to lead the industry in reshaping the water cycle, thereby ensuring plentiful access to water for 2032 and beyond. By aligning our infrastructure plans with the urban renewal that will come with the Olympic and Paralympic Games, we will achieve a more resilient, sustainable and cost-effective water cycle. This integration will lock in long-term water security, enhance the quality of our local waterways and ecosystems, and put downward pressure on our cost to serve.

As the region's largest water and wastewater service provider, we will play a critical role in ensuring the Olympic and Paralympic Games meets its sustainability aspirations and maximises its infrastructure and environmental legacy. We're also looking to partner with other organisations to enable the next generation of connected and intelligent infrastructure that will position South East Queensland as a world-leading Smart City.

THE CHANGING SHAPE OF OUR COMMUNITIES

Our lifestyle preferences have evolved over the years and the urban form of our cities and towns has changed with it.

Cities and towns in South East Queensland were once made up predominantly of low-density residential areas, often typified by the iconic raised and gabled rooflines of Queenslander-style homes sitting on large quarter-acre blocks.

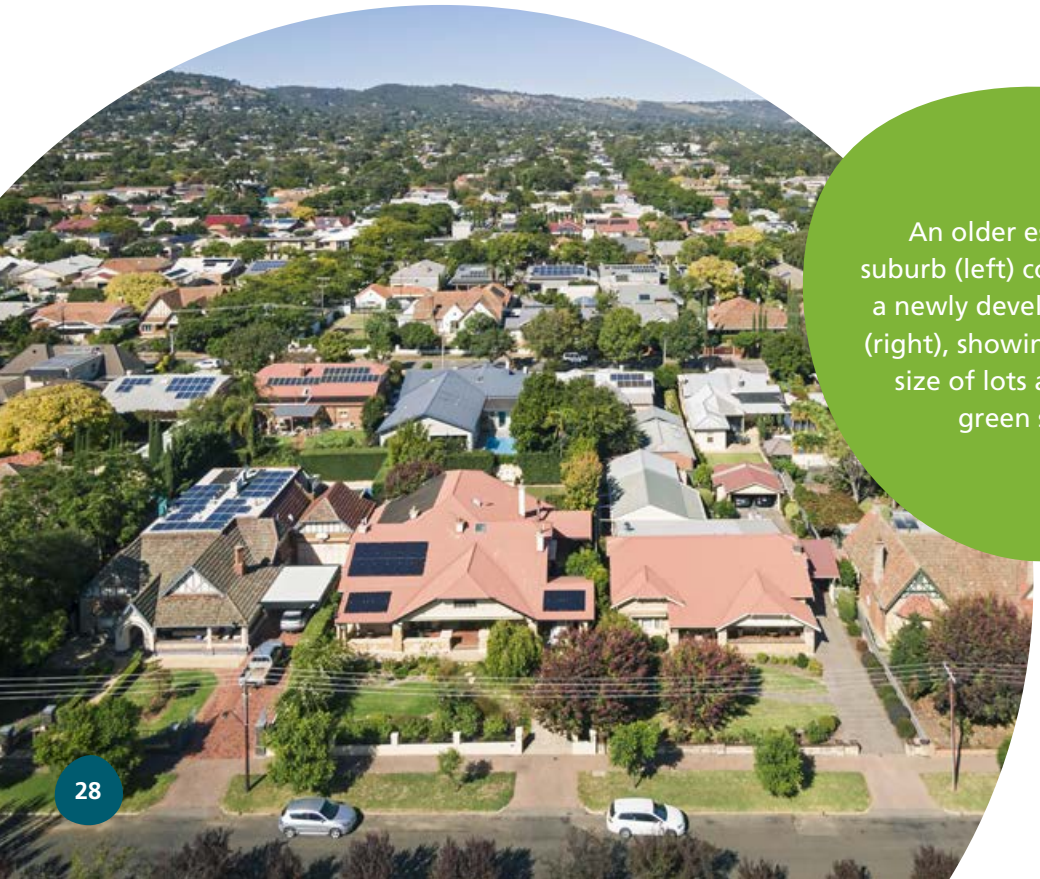
In more modern times, population growth and our desire to be close to places of employment, education, entertainment and recreation has led to more high-density developments, particularly around our central business districts.

The demand for affordable low-density living remains however, with new suburbs and communities continuing to be developed, expanding the urban and suburban footprints. In many of these developments, the size of the house blocks and the homes that have been built on them are significantly different from the low-density living of the past.

These evolving lifestyle preferences bring with them a number of implications for the liveability of our communities.

- The densification and expansion of our urban footprint can outpace the provision of services, such as utilities, transport, health, education, as well as create new demands, such as high-quality parks and gardens.
- The changing affordability of our areas can result in both financial and social hardship, where people cannot afford to live near their friends, families and other social groups.
- The increase in heat-absorbing materials, such as concrete and roadways, combined with limited green space, can increase local temperatures, known as the Urban Heat Island Effect.
- The clearing of vegetation for homes and industry can cause harm to the environment and ecosystems.

Urban Utilities, as with other service providers, must continually work to better understand the lifestyle preferences of our communities, and to improve the way we deliver our services to meet their evolving liveability needs.



An older established suburb (left) compared with a newly developed suburb (right), showing the smaller size of lots and limited green space.

COOLING OUR WARMING CITIES

The Urban Heat Island Effect is the warming of areas of our cities and suburbs due to heat being absorbed, rather than reflected, in the concrete, roads and roofs of our built environment. In Australia, it is estimated that extreme temperatures contribute to the deaths of more than 1,000 people aged over 65 each year – more deaths than bushfires, floods and storms combined.

Many cities around the world have recognised the Urban Heat Island Effect as a critical public health issue and have begun implementing policies and programs to address the causes.

ACTIVITIES HAVE INCLUDED:

Carefully designing new and existing urban areas to take advantage of waterways, such as rivers, wetlands and streams.

Maximising vegetation and greenspaces within cities, such as new parks, gardens and green roofs.

Improving building and planning standards to maximise shade, natural breezes and reduce heat-absorbing building materials.

OUR WAY FORWARD

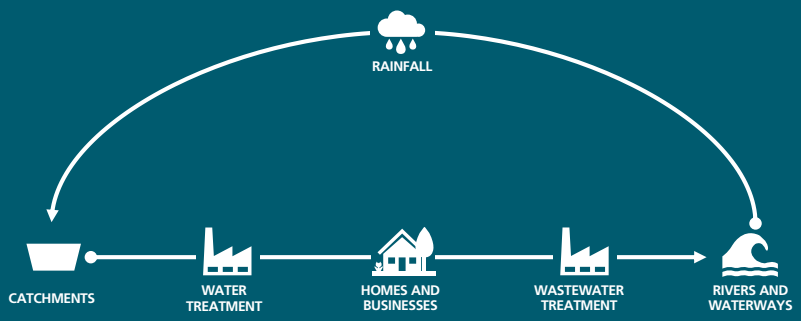
Just as our communities and their liveability needs continue to grow and evolve, so too must our water and wastewater systems to meet these needs, now and into the future.

These systems must evolve to become resilient to our challenges, and be cost-effective to build, operate and maintain so they remain affordable for our community.

- Through maximising the reuse and recovery of water in all its forms and by putting the existing purified recycled water infrastructure to full-time use, our region will reduce its reliance on more expensive and at-risk water sources that can be impacted by future droughts and floods.
- By coordinating our efforts with our community and partners, and being ready to shift our focus as new challenges and opportunities arise, the cost and disruption of evolving our water cycle can be minimised for our customers and communities.

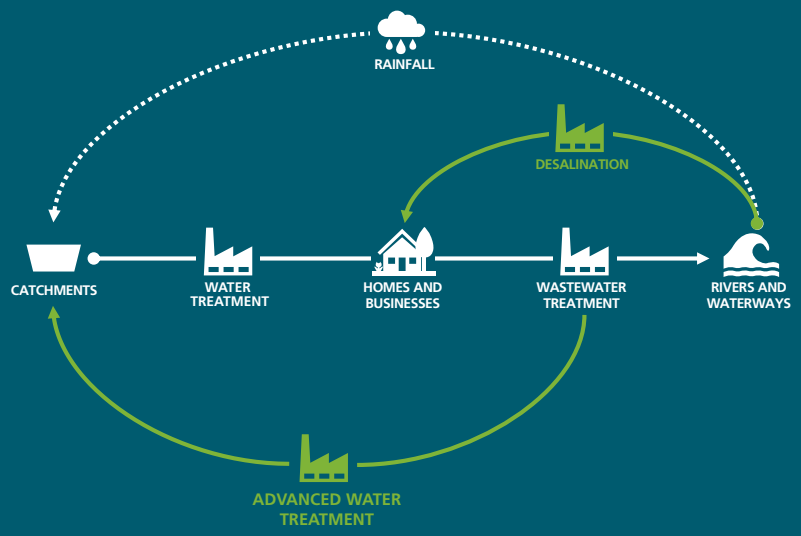
THE TRADITIONAL WATER CYCLE

Traditionally, we have relied on a catchment-to-sea approach that is dependent on rainfall. As our climate continues to change, this rainfall is becoming increasingly unpredictable.



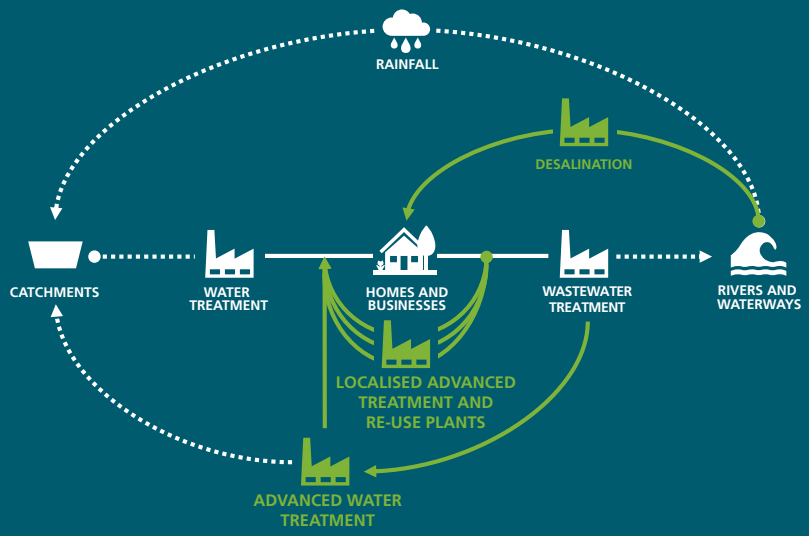
THE WATER CYCLE TODAY

Through investment in desalination on the Gold Coast, and having access to the Western Corridor Recycled Water Scheme when needed, the water cycle has been reshaped at a regional scale.



THE WATER CYCLE OF THE FUTURE

Looking forward, we must take steps to shorten the distance our water needs to travel. This means treating and re-using our water where we use it most, *keeping our water closer to home.*



WHAT THIS MEANS FOR OUR CUSTOMERS AND COMMUNITIES

AN ABUNDANCE OF AFFORDABLE WATER TO MEET OUR LIVEABILITY NEEDS

Our way forward will achieve a more secure, affordable and sustainable source of drinking water to fulfil our communities' liveability needs for generations to come.

This will be achieved by:

- Reducing our reliance on rainfall-dependent water sources for our drinking water supplies, allowing more water to be available even in times of drought.
- Reducing the need for new and cost-intensive water security infrastructure, helping to keep downward pressure on the price of our services.

CONTINUALLY IMPROVING OUR ENVIRONMENT AND ECOSYSTEMS

Our way forward will reduce our overall impact on the environment and our ecosystems, allowing it to continue supporting our way of life, recreation and industry.

This will be achieved by:

- Discharging less treated wastewater to the environment and utilising more nature-based treatment solutions.
- Reducing the amount of water we extract from our waterways, allowing more water to be returned to the natural environment.

MORE WATER AND RESOURCES FOR AGRICULTURE AND INDUSTRY

Our way forward will unlock more water for our agriculture and water-dependent industries that contribute to both our food security and our economy.

This will be achieved by:

- Reducing the overall demand for drinking water from dams and waterways, freeing up more water to be directed to agriculture and industry.
- Recovering more useful nutrients and resources from the treatment of wastewater and other waste streams.

THE STEPS WE ARE TAKING TODAY

The actions we are taking today will shape liveability for the future. These actions are being guided by four pillars:

1 GETTING MORE OUT OF WHAT WE HAVE TODAY

By better understanding how our services are performing, and thinking differently about how we provide them going forward.

2 KEEPING OUR WATER CLOSER TO HOME

By progressively restructuring our infrastructure footprint to close the water cycle.

3 EARNING AND MAINTAINING THE TRUST OF OUR WIDER COMMUNITY

Through involving our customers, community, shareholders and stakeholders in the decisions we need to make and why.

4 SETTING OURSELVES UP FOR SUCCESS

Improving the way we work together as one team to deliver for our customers and wider community.


Daniel
QUEENSLAND
Urban Utilities

GETTING MORE OUT OF WHAT WE HAVE TODAY

Through new and innovative approaches we can get more out of the assets we have today to help improve the quality of our services and cater for our growing and evolving communities, all while keeping downward pressure on our costs.

Every day, our people are working to keep billions of dollars' worth of assets, including pumps, pipes and treatment plants, working to deliver a safe and reliable service to the community.

These assets are built tough, with many first installed over 50 years ago. At the time they were installed, the then industry-leading understanding of how assets would perform in the future was based on their age and the size of the community they served, informing how these assets would need to be maintained and when they would need to be replaced.

Today, our people are using continually advancing new skills, processes and technologies to better understand and manage how our assets are performing, and how the services they provide are supporting our customers and community.

This can help us be more proactive in how we respond to potential issues in our services, while also delaying and avoiding the need for costly new assets and the associated disruption to the community in their construction.

THE STEPS WE ARE TAKING TO MAKE IT HAPPEN

- Incorporating new technologies and techniques that can help us better understand how our assets are performing.
- Improving how our people and systems work with information and technology to make the right decisions.
- Automating our processes so our people can spend more time solving the bigger and more complex challenges.

WHAT THIS MEANS FOR OUR COMMUNITY

- Reducing the disruption to our services from events such as severe storms, power outages and urgent repairs we may need to make on our services.
- Keeping downward pressure on costs and prices by delaying or avoiding the need to build, upgrade and replace new assets, even as our population grows.
- Keeping our customers better informed, with as much notice as possible, on potential impacts to their services.

KEEPING OUR WATER CLOSER TO HOME

Through progressively managing, re-using and recycling water closer to where it is used and collected, we can maintain a resilient and cost-effective service well into the future.

The largest cost associated with providing our services today is in the cost of our assets. The number of assets we have today, what they do, and where they are located, is the result of decisions made many decades ago, based on the best information and technology available at the time. At the time, this understanding called for vast array of pipes and pumps to move water and wastewater vast distances to and from large centralised treatment facilities.

As our understanding continues to advance, enabled by the increasing pace of technology development, we are able to implement new ways of providing our safe and reliable services that can reduce the distance needed to move water, in all its forms, and the number of expensive assets needed to do so.

THE STEPS WE ARE TAKING TO MAKE IT HAPPEN

- Working closely with government, community and our customers to better deliver on the evolving needs of our community.
- Taking an adaptable and agile approach so we can rapidly switch our planning and delivery activities as priorities and circumstances change.
- Using our improved understanding of our how our assets are performing to help make better decisions on what assets are needed and when.

WHAT THIS MEANS FOR OUR COMMUNITY

- Increasing the resilience and reliability of our water supply and long-term water security.
- New methods of providing our services that can enhance and improve our natural environment, such as rehabilitating creek corridors and wetlands.
- Opportunities for town and neighbourhood scale micro-grids, and the recycling and recovery of water and other resources.

EARNING AND MAINTAINING THE TRUST OF OUR WIDER COMMUNITY

The steps we need to take towards delivering our services into the future will require the trust and support of our wider community. We recognise that this trust must be earnt and maintained through working openly and collaboratively with government, councils, regulators, stakeholders and our communities to help us understand, shape and deliver on our collective liveability needs.

We are mindful that the services Urban Utilities provides are some of many that contribute to the liveability of our communities. Liveability outcomes rely on a wider system of actions from multiple organisations and cannot be effectively delivered by just one organisation in isolation without risking duplication and avoidable costs.

THE STEPS WE ARE TAKING TO MAKE IT HAPPEN

- Having better conversations on the issues that matter most to our wider community.
- Engaging early and at all levels of government to be part of the decision making in the way we plan our cities and regions.
- Being open and willing to work with other parties, delivering on the commitments we make to others, just as we would ourselves.

WHAT THIS MEANS FOR OUR COMMUNITY

- Meaningful opportunities to have their say and be involved in the decisions on how we provide services to their area.
- Enhancing the liveability of our communities through co-creating water sensitive and cost-effective urban and regional developments.
- Partnering and collaborating with other organisations, both public and private, in the design and delivery of solutions.

CASE STUDY: COLLABORATING WITH THE COMMUNITY ON THE FUTURE OF CANNERY CREEK

During intense rainfall events, stormwater can flood our wastewater network, causing wet weather overflows. These flows can sometimes impact private properties, typically in low-lying areas.

One such area is in Brisbane's north-east, specifically the adjoining suburbs of Banyo and Northgate.

At Urban Utilities, we're planning an innovative nature-based solution to help manage the impact of wet weather overflows in these suburbs, whilst improving the health of the neighbouring Cannery Creek and enhancing liveability in the local area.

INVOLVING THE COMMUNITY IN OUR DECISION-MAKING

From the outset, we knew that Cannery Creek and its surrounds were important to the community, so we asked them to help us design an effective solution that would work for their local area.

We formed a Community Planning Team (CPT), consisting of 23 self-nominated community members, which considered several factors over many workshops and site visits. The CPT was presented with two main options to address wet weather overflows: a traditional engineering approach, or a more sustainable approach that included using a wetland and vegetation and would also deliver environmental and community benefits. Ultimately, the CPT recommended that we pursue the nature-based solution.

HOW WILL IT WORK?

The project will involve creating a new wetland and building a wet weather pump station and 2km pipeline. The proposed pump station will operate during significant rainfall events to divert the wet weather flows away from Cannery Creek and along the 2km underground pipe to the wetland and two bioretention basins.

The wetland's healthy ecosystem will act like nature's filter, trapping sediment and absorbing nutrients. After passing through the natural features of the wetland and basins, the flow will continue on its natural course into the Kedron Brook Floodway and then Moreton Bay.

We also plan to install a series of sediment basins in Cannery Creek to manage and filter stormwater flows. These natural features will reduce erosion in the creek and protect the downstream waterways and Moreton Bay from the impacts of soil and sediment.

In addition, creek banks and surrounding area will be beautified, with new shared paths providing access for the community to enjoy.

Breaking ground on the Cannery Creek project.

A concept design of the site.

WHAT'S THE STATUS?

Construction began in mid-2022, with an expected completion date in 2024.

We'd like to thank our delivery partner Fulton Hogan Utilities as well as Brisbane City Council, Queensland Government, Commonwealth Government and many other agencies and organisations which have been engaged and contributed to this project so far.

Thanks to the collaborative approach, we'll be able to make Cannery Creek and its surrounds more resilient to wet weather events to ensure the community can enjoy this beautiful area for years to come.

SETTING OURSELVES UP FOR SUCCESS

To support our future successes under these pillars, we will need to work together differently, both within our organisation as well as with our customers, the wider community and other partners.

AN AGILE AND ADAPTABLE WORKFORCE

While we understand where we are aiming for, and what we can do today to help us get there, we recognise that the future can be uncertain and unpredictable.

To best respond to this continually changing future, we will need to be agile and adaptable in how we work. This means being ready and able to change what we do, and the way we do it, to both better respond to changing circumstances, as well as seize new opportunities.

A TECHNOLOGY AND DIGITALLY LITERATE WORKFORCE

We expect technology to continue changing in the future, providing us with new ways of working, new ways of engaging with our community, and new skills and methods that we will need to learn and implement into the way we work. This will be supported by having the right people and the right processes to make the right decisions at the right time.

SCOTT IRELAND

Manager Civil Delivery

From school, I went straight into trade-based roles, working as a plumber before starting with Urban Utilities in 2014 as a Water Industry Worker.

I've worked a few different roles in the organisation and now look after our crews operating in the northern part of our service area.

I only had to start using a computer a few years ago.

Technology is great, it will become an integral part of the way we work, and the way we do the fundamentals – turning up to jobs, digging holes, repairing pipes – the stuff that keeps our services running for our community.

Some of our people on the tools have been here for 35 years or more. They started in an industry that looked pretty different from today and have a lot of experience and know-how that we are going to need for many years to come.

There are parts of our workforce that haven't had to use any technology for most of their career. Picking up how to use new technology is something that younger generations take for granted, but is not something that always comes easy.

That said, we've seen a lot of technology come in over the years and have always adapted and made the most of it, together with the people around us. The future will be no different.

LUCILLE BURKITT

Brand and Creative Services Manager

Connecting with customers across digital channels and content platforms is more integral than ever, and I'm always really proud to coordinate such an important channel for Urban Utilities. Our digital communications give our customers an opportunity to experience the effort that goes into running our water and wastewater services.

We've been able to use these channels to keep our customers more quickly informed of what we do, and when we are doing work on our services that may impact them.

It's not all one-way however, as our community has also helped give us input and feedback along the way that has helped improve our awareness and understanding of what is important to them and how we fit in.

It has been great to see how engaged and supportive our community is in what we do.

I enjoy finding new ways and technologies to better connect with them, and to be that conduit for their feedback back into our organisation.

STAYING CONNECTED WITH US

The lived experience of our customers is at the centre of the decisions that we make. We must be continually engaging with our customers and wider community to better understand their needs and expectations of our services, develop a shared view of our current and future water and liveability challenges, and provide opportunities for genuine community involvement in shaping the decisions that are made.

CONTINUING OUR JOURNEY TOGETHER

Urban Utilities is committed to working together with our community, stakeholders and key partners in our shared journey to the future.

As we step forward, it is important that we continue to seek your views, aspirations and concerns to help us evolve and improve the services we provide to continue to meet your liveability needs.

OUT AND ABOUT IN THE COMMUNITY

While you are likely to see us around the community when our people are out keeping our services running, we also run a number of other events and activities in the community to provide opportunities to meet with us.

OUT AND ABOUT IN THE COMMUNITY

You can regularly find us at community events, including Green Heart Fairs and the Ekka, where we provide information on what we do, our latest projects, and how you can get involved.

SUPPORTING OUR SCHOOLS

Through our Education Program, we help local schools and students improve their understanding of the value of water. This includes initiatives such as the Water Warriors, hosting tours of our facilities for schools, and providing support for programs that encourage Science, Technology, Engineering and Math (STEM).

RESEARCH AND DEVELOPMENT

We partner with universities, research institutions and other organisations, such as technology start-ups, to support important, industry-leading research and development that can help us deliver more effective services to our communities. Many of these projects are housed at our Innovation Precinct, located onsite at our Luggage Point Resource Recovery Centre.

VOICE OF CUSTOMER TEAM

Our Customer Insights team works closely with community members, hosting regular panels and workshops to share information and insights and discuss the issues most important to our community.

ONGOING ENGAGEMENT PROJECTS

At a local level, we seek to engage with communities on individual projects to help us make the right decisions, such as our Cannery Creek project, where we worked with interested community members to incorporate their needs and ideas in solving a localised problem.

STAKEHOLDER AND KEY COMMERCIAL CUSTOMER ENGAGEMENT

We meet regularly with our stakeholders, such as our shareholding councils, and our largest water-reliant commercial and industrial customers to explore opportunities to better work together. This includes hosting forums to raise awareness of issues such as water security and land development.

UrbanUtilities

FOR MORE INFORMATION VISIT:

urbanutilities.com.au
or call **13 26 57**

Urban Utilities
GPO Box 2765 Brisbane QLD 4001

ABN 86 673 835 011