

2025 Pricing Proposal Community Panel

Engagement Report

November 2023



Acknowledgement of Country



Hunter Water acknowledges the Traditional Countries of the Awabakal, Gaewegal, Darkinjung, Wonnarua and Worimi peoples on which we operate and the Countries beyond where our water flows.

We recognise and respect their cultural heritage, beliefs and continuing connection to the lands and waters of our Traditional Custodians and pay respect to their Elders past, present and emerging.



Artwork by Tyson Jolly

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PART ONE



About this report

This booklet is here to make your tough decisions easier. In addition to your participation on this panel, Hunter Water's engagement program for its pricing proposal has been extensive, involving many everyday customers from all walks of life, employees, industry stakeholders, customer advocates and even a Customer Engagement Advisory Panel.

This customer engagement report is one of several resources to help you to interpret what the community wants and make informed decisions.

The information contained in this report will give you a deeper understanding of the community values identified through prior engagement activities. It will also serve as a guide to the issues you will be working through.

The money we spend or save is yours, not Hunter Water's. We can help you to understand the topics and the choices, but everyone agrees that you as a representative of our community are best to guide us as we navigate the difficult path which lies ahead.

How to read this report

This report has been broken into several chapters and sub-chapters. The chapters provide an overview of the services that Hunter Water provides and the issues that you will be working through as part of our Community Panel.

You might find it helpful when reading this report to consider the following:

"You/your" – refers to the Community Panel and members

"We/our" – refers to Hunter Water

"The corporation/it" – refers to Hunter Water

"Customers" – refers to Hunter Water's customers

"Community" – refers to anyone who lives in the area where Hunter Water operates or is affected by our infrastructure or operations

"Community Panel" - refers to the 2025 Pricing Proposal Community Panel, which is made up of approximately 50 members

"Consumers" – refers to anyone who consumes our services, regardless of if they pay for them or live or work in our area of operations, for example, people travelling in our area on holiday.

"Deliberative Forum" – refers to community engagement process followed by the Community Panel

"First Nations Peoples" – refers to people who identify as Aboriginal and/or Torres Strait Islanders.

A full glossary of terms and abbreviations is provided at the end of the report.

A note from our engagement research partner, Insync

Welcome to the Community Panel, which is Hunter Water's name for this deliberative forum. "Panel" and "Forum" are used interchangeably in this report.

My name is James Garriock, and I've led the Insync team in helping Hunter Water to engage with the community in advance of its pricing proposal. In the Forum you'll hear much more from my superb colleagues Tony Matthews, Jane Tyquin, Sanjaya Gunaratne, and Emily Harrison. My role is to support the process and ensure it is fair, and that Hunter Water make good on their promise to you, "we will incorporate your recommendations to the maximum extent possible".

Insync is an independent researcher. We have nothing "on the line" regarding the decisions you make.

In addition to facilitation, we are here to help you to understand community preferences to enable a deeper, richer, more informed debate.

This is the 16th time we have done an end-to-end pricing proposal engagement for a water utility. This report is made up of things which we know from research, and some opinions based on experience. For example, we might state, "X% support is not considered compelling in research terms". You are welcome to accept or reject it.

Another example of our opinion is where we ask you to be aware of how cognitive biases may have impacted the survey results, and even your own thinking about these topics. This is also a judgement for you to make.

There's a big difference between the way statistics get dealt with in the media, and how we'll be using them in the Forum. In the media they are often presented as being true, but every research method has its shortcomings. Instead of defending everything, we'll be actively pointing out failings as well as the strengths of what we've done. We'll be on hand throughout the deliberative forum process if you need help. All you need to do is ask.

We are there to ensure the Community Panel can discuss, debate and deliberate without influence from Hunter Water. The Community Panel is empowered to request speakers and other information needed to make good decisions. The other essential ingredient is wisdom, and that is partly a function of being aware of cognitive biases.

What is cognitive bias?

Sometimes the human brain doesn't have perfect judgement. All of us make irrational decisions daily, eating what might not be good for us, incorrectly assuming things about a person from the way they dress or speak, and making mistakes about the chances of good and bad things happening. These are biases.

Being aware of your biases can go some way to allowing for them, but it has also been shown that the average person underestimates how biased they are. We all have biases and our speakers may unconsciously alter what they say to try to affect your deliberations. We'll discuss various cognitive biases when we meet in person, but be especially aware of "framing bias". The way a question is framed can influence the answer you chose. For example, an energy company could say "our needs for power are rising, do you think we should build a new power station?", or they could say "there is a cost of living crisis, do you think we should ask people to conserve power to avoid the costs of a new power station?". Every question needs a frame, but I'd encourage you to ask yourself whether alternate frames might lead to alternate decisions.

Making sure that everyone can have a say

We have used a rigorous process to ensure that the engagement process for the upcoming pricing proposal has been universal and inclusive. Customers and our community have been provided with a multitude of opportunities to participate for more than a year, including people from different areas and using different methods. Our customers have helped design the process and set the agenda that you'll be working on.

Hunter Water serves a diverse community. The demographics of our community are provided in the section called "Our customers, consumers and community". We have worked hard to make sure all voices can be heard. Examples of the types of actions we have taken to make sure our engagement program is accessible and inclusive are provided below.

Customers experiencing vulnerability

The pandemic has shown that anyone can find themselves in financial difficulty. We have put great effort into bringing the views of these people to the fore. Our customer support team works closely with support agencies for customers experiencing vulnerability. We have conducted qualitative research with these agencies, and their clients, to understand the challenges they face and find solutions. We will continue to work with these networks to ensure these voices are heard throughout our engagement program.

During each of our engagement activities for the upcoming pricing proposal we have recorded demographic information so that we can understand whether types of customers have different priorities and preferences, including those experiencing financial vulnerability. We will financially compensate participants in face-to-face engagement activities to ensure participation is not reserved for those who can afford to participate.

People who live with disability

People living with disability sometimes experience barriers to getting involved in engagement activities. To overcome these barriers, most of the engagement activities has held so far have been online. All face-to-face activities are conducted at venues that are accessible to people who live with disability and we provide other support required to ensure that there are no impediments to participation. We will make our materials able to be read by screen readers and provide any other support required for engagement with participants who are blind or have low vision. We also provide Auslan interpreters, and any other support required for engagement with participants who are hard of hearing.

First Nations peoples

As described on page 16 of this document (Our relationship with First Nations People), we are committed to working with people who identify as Aboriginal and Torres Strait Islanders. Our Reconciliation Action Plan includes our commitment to continuing conversations, along with better listening and learning with our First Nations peoples. In conjunction with local Aboriginal leaders, we are currently codesigning a new model to understand how, and what, First Nations People want to engage with us about, and how we can work together to deliver on common goals.

We have specifically recruited First Nations people to participate throughout each stage of engagement for our pricing proposal to ensure that these voices are heard.

We are always looking for ways to do more

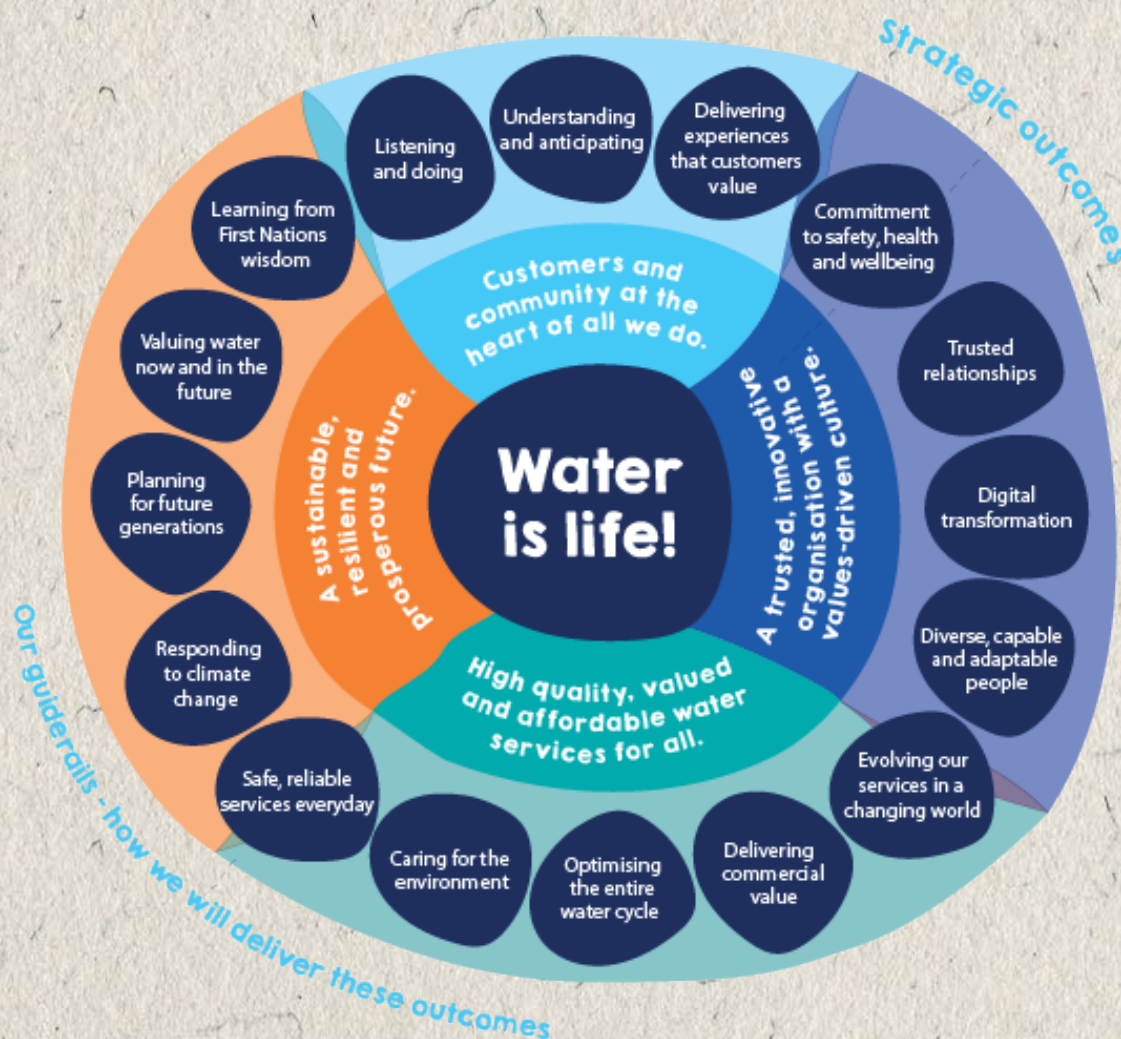
This panel represents a genuine opportunity to make decisions of real substance, and we encourage you to participate, challenge, question, debate and deeply consider the topics presented. If you can think of ways to make the panel or the overall engagement more universal and inclusive, we strongly encourage you to share them.

Our vision and purpose

Water is life.
We are creating a sustainable water future for all.

Who we are

We are here for our customers and community
We are passionate about water
We care about our people
We aspire to be trusted partners



We adopted Miromaliko Baato: Our Corporate Strategy in July 2023. It is available on our website here <https://www.hunterwater.com.au/about-us/our-commitment-to-you/strategic-priorities>. In Gathung language, Miromaliko Baato means saving water. This is the closest way we can express our vision 'water is life' using one of the languages of the Traditional Custodians of the land in which we operate.

Miromaliko Baato is a long term, enduring strategy and builds on Hunter Water's strong track record to provide an ambitious blueprint to create a sustainable water future for all. It is framed around four strategic outcomes that we aspire to deliver and is supported by a set of guiderails to help guide how we'll get there. It is our contribution to progressing the United Nation's Sustainable Development Goals; to support people, promote prosperity and protect the planet.

What we do and what we deliver

Hunter Water serves a population of over 630,000 people in almost 260,000 homes and businesses throughout the Lower Hunter region. We are the second largest urban water utility in NSW and amongst the group of 15 major urban water utilities in Australia with more than 100,000 customers.

We are a vertically integrated water utility – an operator and retailer from catchment to tap, sink to waterway. Our main responsibility is to supply reliable, high quality water and wastewater services. We also provide some stormwater, trade wastewater, recycled water and raw water services.

We provide stormwater services to almost 75,000 properties, which is about one third of our water and wastewater customers. Stormwater is rainwater that runs off buildings and land. Stormwater is carried in stormwater channels and discharges directly into creeks, rivers, the harbour and the ocean.

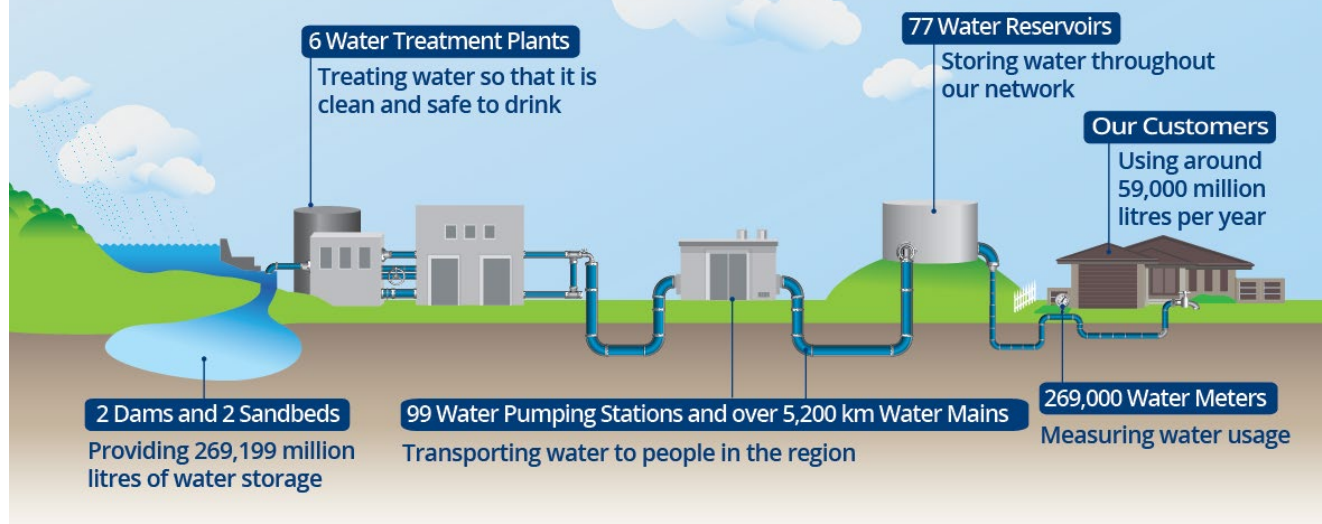
We own and maintain about 90 kilometres of stormwater channels in the Newcastle, Lake Macquarie and Cessnock local government areas. Our role is to maintain the current capacity of the major concrete channels and culverts in specific areas. Local councils have care and control of street level stormwater infrastructure such as street kerb and gutter, stormwater pits, and water quality devices.

Councils' role is to manage the quality, quantity and frequency of stormwater runoff from existing or proposed developments (both public and private) including stormwater discharged from roads, buildings, open spaces and any other areas. This is achieved through land use planning, development control and flood mitigation work.

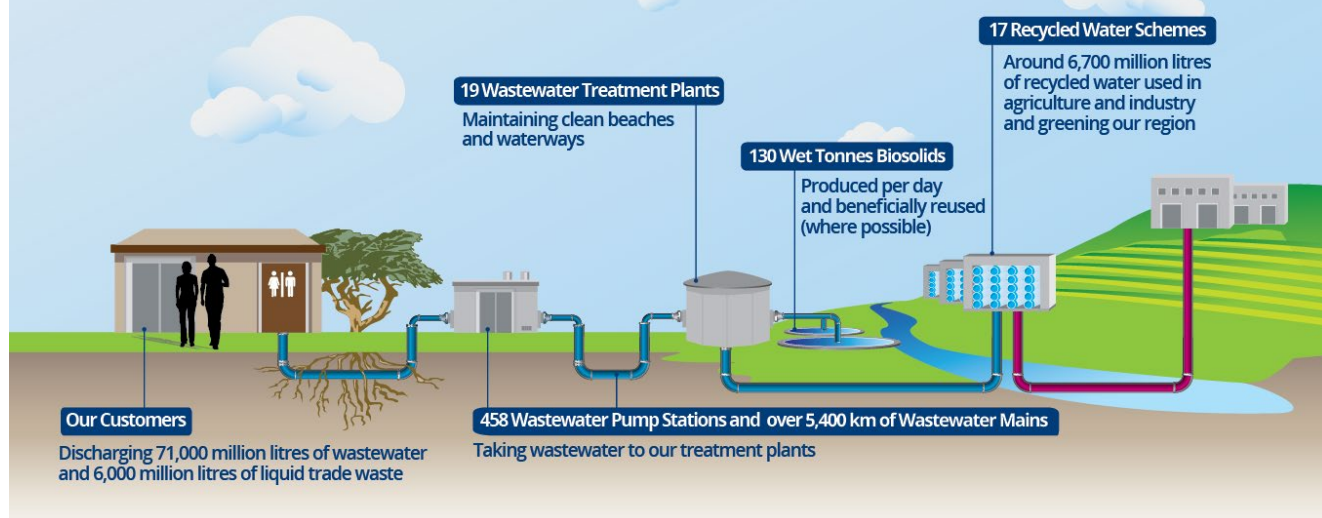
A snapshot of our assets is shown in the graphics below. Our prices are based on a regulatory asset base with a value of approximately \$3.6 billion.



Water Services



Wastewater services



A provider of essential services

We are owned by the NSW Government and are governed by the Hunter Water Act 1991 and the State-Owned Corporations Act 1989. We began providing services in the 1880s, and just before becoming a corporation we were known as the Hunter District Water Board.

We operate within a comprehensive regulatory framework that includes regulation under various state and federal legislation and guidelines, which are administered by various government agencies. Regulations and regulators are in place to protect public health and safety, consumers, and the environment and encourage competition. Some examples include the NSW Environment Protection Authority, NSW Health and the Independent Pricing and Regulatory Tribunal (IPART).

IPART provides independent regulatory decisions to protect the ongoing interests of customers, consumers and citizens of NSW. IPART regularly reviews and sets prices for most of our services, as we are the only provider of these services for most of our region.

We are currently developing a pricing proposal that relates to our main retail services. This is the subject of the Community Panel.

Our Operating Licence is set by the NSW Government and is administered by IPART. It enables and requires us to provide services and contains the terms and conditions regulating how we undertake our functions, including quality and performance standards. Our Operating Licence contains a Customer Contract. It outlines the rights and obligations of users of Hunter Water services and sets out minimum standards of customer service. Owners of land connected to water or wastewater services are deemed to have entered into the contract, except where specifically overridden by a separate agreement.

We are held accountable for complying with our Operating Licence through annual reporting and annual audits by IPART. We are open and transparent about our performance, our performance reports are available to the public on our website.



Our region

We provide our services to customers across Cessnock, Dungog, Lake Macquarie, Maitland, Newcastle, Port Stephens, and a small part of Singleton local government areas.

The Lower Hunter is a vibrant, diverse and growing community. From a thriving metropolis to small towns, from new arrivals to the most ancient culture of all. From some of the world's biggest companies to our smallest sporting clubs and community groups, everyone relies on water.



Our customers, consumers and community

There are 644,860 people in our area. We provide services to 629,734 of those people in homes and businesses. Approximately 96% of properties receive both water and wastewater services from us. Approximately 4% receive only water services from us. These properties tend to have onsite wastewater management systems like septic tanks.

If we look at the number of connected properties, about 95% are households (253,270) and 5% (15,170) are businesses or industry. However, business and industry use about 26% of the total water we supply.

Around 20% of the households we supply live in apartments, flats and units. The other 80% live in freestanding houses.

Most people own or are paying off the mortgage on their own home (69%) but quite a few (28%) are renting (3% other or preferred not to say).

Around 7% of our community speaks a language other than English at home and around 6% identify as Aboriginal and/or Torres Strait Islanders.

A high proportion of people in the area where we provide services are concession card holders (39%). This is quite a bit higher than in the Greater Sydney region (23%).

The Greater Hunter region has a high proportion of 'disadvantaged' postcodes, based on the Australian Bureau of Statistics Socio-Economic Indexes for Areas (SEIFA) data which ranks areas nationally according to their relative socio-economic disadvantage, using Census data. The 2306 postcode (suburb: Windale) is the most disadvantaged postcode in NSW and is in the top 0.5% of most disadvantaged postcodes in Australia. In our area, 35% of postcodes are considered amongst the most disadvantaged.

Hunter Water helps around 1,000 to 1,500 customers each year who are experiencing temporary or permanent financial vulnerability and need assistance with their bills. The number of customers in assistance programs has reduced since COVID but not reduced to pre-COVID levels due to current cost of living challenges.



Our relationship with First Nations Peoples

Our business operates within the traditional Country of the Awabakal, Birpai, Darkinjung, Wonaruah, Worimi and Geawegal peoples. We recognise and deeply value their cultural heritage and beliefs.

We are committed to taking tangible steps towards reconciliation, building respect and connection with First Nations communities and applying the wisdom of Aboriginal thinking to help solve complex problems.

We have named our Corporate Strategy “Miromaliko Baato”, which means “savings water” in Gathung language, one of the languages spoken by the Traditional Custodians of the land upon which we operate.

The concept that water is life is paramount to First Nations peoples as it links to the value of water, and the history and teaching through generations around respect for the land and our water. It governs their lore and their life, and it is about protecting the water and the earth, keeping waterways clean, and that everything is connected. We value the same system and way of thinking that First Nations peoples do, and have always done, to ensure a sustainable water future for all of us.

We seek to learn from the enduring wisdom and holistic thinking of First Nations people, reaching into the past to protect the future.

Our Reconciliation Action Plan (RAP) is our promise to move to a place of equity, justice, and partnership together. This RAP reflects our commitment to create improved economic, health and social outcomes for Aboriginal and Torres Strait Islander peoples. In it we commit to a range of actions across four key areas: relationships, respect, opportunities and governance. Through partnership, we will create meaningful change by providing employment, procurement, and community engagement opportunities for First Nations peoples.

You can read more about our reconciliation actions and relationship with First Nations peoples at <https://www.hunterwater.com.au/about-us/our-commitment-to-you/reconciliation>

We have engaged local Aboriginal consultancy, Dhiira Pty Ltd, to help us to develop an Aboriginal Engagement Plan. This scope of this work involves engagement with key internal staff to ground-truth the current context, challenges and opportunities to engage with local Aboriginal people and organisations through the work we do. In October 2023 we held a series of workshops with employees to understand in detail what the barriers are to engaging, and what's needed to support our business and First Nations people in developing lasting relationships and partnerships. In conjunction with this internally facing work, we are currently codesigning a new model to understand how, and what, First Nations People want to engage with us about, and how we can work together to deliver on common goals.



What is a pricing proposal?



A pricing proposal is a five-year review of the price of water and wastewater services.

In New South Wales, water utilities that provide services to urban centres in Greater Sydney, the Central Coast, the Lower Hunter and Broken Hill complete a pricing proposal, which sets out the services and service levels we propose to deliver to customers, and the proposed prices customers will pay for these.

A pricing proposal sets out what our customers need to pay, what they get for what they pay, and commitments to keep us accountable for these promises.

IPART's price review process is called a 'propose-respond' approach. We must submit our pricing proposal in September 2024 detailing the expenditure we need to provide specific service levels and prices to recover that expenditure from 1 July 2025 to 30 June 2030. IPART expects our proposed expenditure to be efficient and not wasteful or excessive. IPART will typically hold a Public Hearing and publish an Issues Paper, Draft and Final Reports before publishing a Determination containing the prices that it has decided in May/June the following year. While IPART's process provides multiple opportunities for customers, consumers, the community and other stakeholders to have their say on our pricing proposal, IPART expects that we have already listened and reflected what we've heard in our proposal.



The role of IPART

IPART exists to help the people of New South Wales get safe and reliable services at a fair price. IPART is an independent authority that reports its performance to the NSW Parliament. Its decisions are binding – they are mandatory.

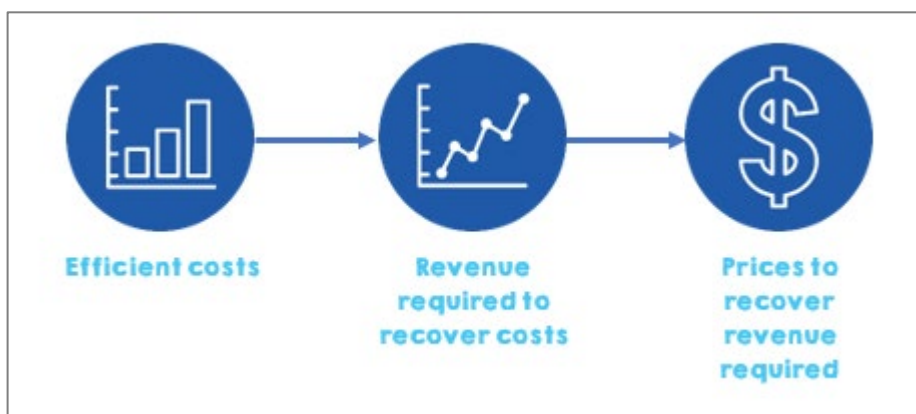
Before making its decisions, IPART conducts transparent, impartial reviews. IPART (the Tribunal) is made up of three permanent members. The Tribunal is advised by a Secretariat consisting of highly experienced economists, financial analysts, lawyers, engineers, and other professionals. IPART can also hire consultants and other experts to provide advice and assist with its reviews.

IPART sets the prices that Hunter Water can charge for almost all of the services that we provide. They have this role because water and wastewater services are essential services, delivered to customers that mostly have no choice in who they buy their services from.

Previously, IPART focused on protecting consumers from unjustified prices. IPART recognised that cost cutting could lead to short-term thinking and may not provide the best approach to tackling challenges like the COVID pandemic, changes in population, climate change, and sustainability. It is important for water businesses to have resilient, sustainable capability so that they can deliver safe, reliable water services during tough times. IPART's new regulatory approach encourages water businesses to deliver better long-term value, including bringing customers into decision-making about the design of services and setting of priorities.

How prices are set

IPART sets the prices that Hunter Water can charge its water, wastewater and stormwater customers based on the **efficient** costs needed to deliver services.



Efficient costs

When we say efficient costs, we mean that what we spend:

- isn't wasteful or "gold plated"
- enables us to comply with all laws and regulations, including rules that set the minimum quality and reliability of the services we provide
- only pays for "extras" that our customers and community value and benefit from more than they cost.

Hunter Water - and IPART - take care to make sure costs are efficient because water and wastewater services are essential services, delivered to customers who mostly have no choice in who they buy their services from.



Revenue required to recover costs

IPART uses an approach called a building block model to turn the costs into a revenue requirement. You could think of this as being a bit like building a tower out of different height Lego blocks. To keep things as simple as possible we'll ignore a couple of small blocks and focus on the two ways we can spend money: operating expenditure ('operating') and capital expenditure ('capital').

The next few paragraphs describe the difference between operating and capital expenditure, and how they are treated in the building block model, using some examples from everyday life.

Understanding prices and charges



Operating expenditure, or operating costs, include administration, maintenance and other costs necessary to operate our services. It covers things like electricity for pumping, fuel for the cars of maintenance workers to drive to repairs, chemicals like chlorine that keep the water safe to drink, and the salaries and wages for employees. If you own a property, this would be like the money you spend making minor repairs, on electricity, or on council rates or strata fees. Most people would call these running costs.

In the building block model operating costs are passed on to customers. That is, if we spend \$100 of operating expenditure in 2025 then the revenue requirement associated with this is also \$100 in 2025.

Capital expenditure, or capital costs, involve buying or building infrastructure. It covers things like replacing pipes that keep bursting, expanding treatment plants so that they can handle wastewater from more customers or putting in new technology to improve water quality. If you own a property, this would be like adding another bedroom or renovating the kitchen. These improvements increase the value of your home.

In the building block model capital costs are treated in two ways. If we spend \$100 of capital expenditure in 2025 then we don't get the money back from customers straight away. We get it over time through:

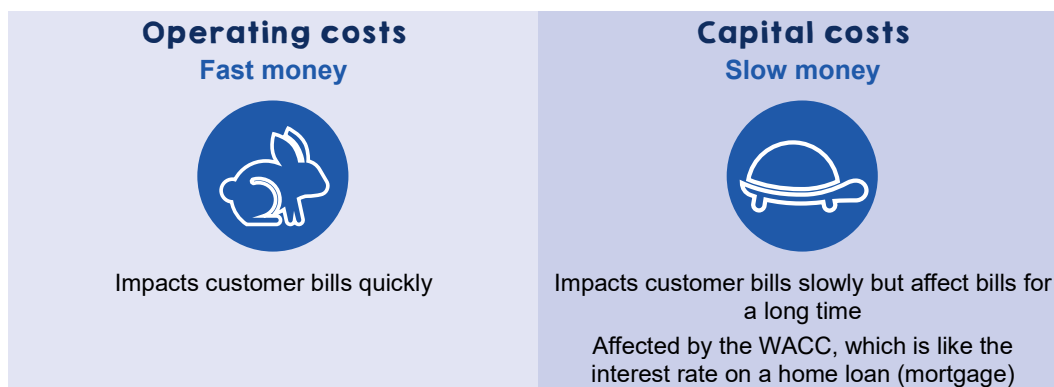
1. Return **on** assets (like interest rates) – when people invest in stocks or shares they expect a rate of return for letting a company use their money. Hunter Water must cover the borrowing costs of money it spends. The 'interest rate' has a more complicated name (weighted average cost of capital, or WACC) and is set by IPART based on what is fair for a utility. For example, if the WACC is 4% then Hunter Water gets \$4 back from spending \$100 of capital ($4\% \times \$100$). Hunter Water gets this return every year from customers, so decisions today affect customer bills tomorrow and for many years.
2. Return **of** assets (depreciation) – when people or businesses use equipment they consume (use up) part of the equipment each time. For example, Google tells us that the standard lifespan of running shoes is 500km to 800km. Let's call it 500km. If you run 5km each time you exercise, you use $1/100^{\text{th}}$ of the shoe each time you run. Notice your sole getting thinner as the rubber wears away? After 100 runs you'll probably need to replace your shoe. The same thing happens to our infrastructure. A pipe might last 100 years on average, so each year we use $1/100^{\text{th}}$ of the value of the pipe. If Hunter Water spends \$100 on a water pipe that is expected to last for 100 years, then it gets \$1 every year from customers for depreciation. IPART does checks to make sure Hunter Water is reasonable when it estimates asset lives used for depreciation. Asset lives means how long each piece of infrastructure is expected to last in years.

These examples are simplified and the numbers are only examples, but it is important to note:

- \$100 of operating expenditure in a year results in \$100 of revenue requirement.
- \$100 of capital expenditure in a year on infrastructure with a 100-year life and 4% interest rate results in \$5 of revenue requirement (\$4 return on assets plus \$1 of depreciation).

The total revenue requirement in this example is \$105 even though Hunter Water spent \$200 in that year.

Key concept: The types of costs (operating and capital) have different impacts on customer bills



Prices to recover required revenue

The simplest way to think about this step is that revenue is converted to prices by estimating the sales volume. That is the price is set by dividing the revenue required by the number of sales.

Let us use hammers as an example. If your required revenue is \$105 and you think you can sell 50 hammers, you might set prices at \$2.10 per hammer. You might also think about pricing the hammers based on size so that big hammers have a higher price than little hammers. Water and wastewater are a bit more complicated than hammers, so there are lots of factors to think about when setting prices. We must estimate the number of properties that will receive our services and how much water those properties will use. We have to think about:

- water and wastewater services being essential services
- what is fair for different types of customers
- whether our costs are fixed or variable and if they are variable, what makes them bigger or smaller and
- customer preferences.

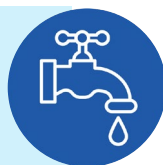
It is challenging to balance all these considerations.

The charges, and how they are calculated

The charges on your Hunter Water bill depend on what services you have connected at your property, the type of property, and whether you own or are renting. We bill households and most businesses three times each year (four-monthly). We bill some businesses and industrial customers monthly, especially if they use a lot of water.

Hunter Water bills are made up of both fixed and variable charges. Our prices for 1 July 2023 to 30 June 2024 are explained below.

Water charges



Water bills for households and businesses are made up of both fixed and variable charges.

Water usage

Water usage is a variable charge based on the amount of water you use at your home or business.

The variable charge increases when the region is in drought to encourage you to save water so that the water we have lasts longer, and to cover our costs in bringing in additional water supplies.

Household water meters are read every four months, and we bill you for the water used in that period.

Water usage charge (non-drought)	\$2.89 per kilolitre
Water usage charge (during drought)	\$3.39 per kilolitre

Water service

The service charge is a fixed four-monthly charge that isn't related to your usage. It covers the cost of the pipes, dams, groundwater, treatment, and other infrastructure needed to deliver drinking quality water safely to you.

Households in individual flats (or apartments) or houses pay \$29.51 per year. That's around \$9.84 per four-monthly bill, depending on the number of days in the billing cycle.

The yearly charge currently includes \$1.93 per year for environmental projects that pays for improving how stormwater drainage channels look and recycled water to keep a sporting field in Lake Macquarie green. These are investments that customers told us they wanted us to make when we consulted them for our 2020 pricing proposal.

Businesses pay a water service charge based on the size of each of their water meters. The charge for one 20mm water meter is the same as the water service charge for households. Customers that use more water have larger water meters, multiple water meters, or both. These customers pay higher water service charges based on their meter size relative to 20mm.

We have previously surveyed customers about their preferred mix of fixed and variable water charges and why. Our current charges are based on these survey results and the cost of providing services to different types of customers. That's why the balance of fixed and variable charges is out of scope for the Panel.

One kilolitre = 1,000 litres
Or, the equivalent of

25		5 minute showers
223		toilet flushes
7		top load washing machine cycles
13		front load washing machine cycles
33		dishwasher cycles

Wastewater charges



Wastewater (sewer) bills for households are made up of fixed charges only.

Wastewater (sewer) bills for businesses are made up of both fixed and variable charges.

Wastewater usage

Wastewater usage charges are a small variable part of business customers' bills. In the past, they were intended to cover variable costs associated with wastewater treatment - mainly power, chemicals and waste disposal. These usage charges apply to a calculated volume of wastewater discharged, based on metered water usage. They only apply when businesses discharge more than 120 kL per year.

Wastewater service

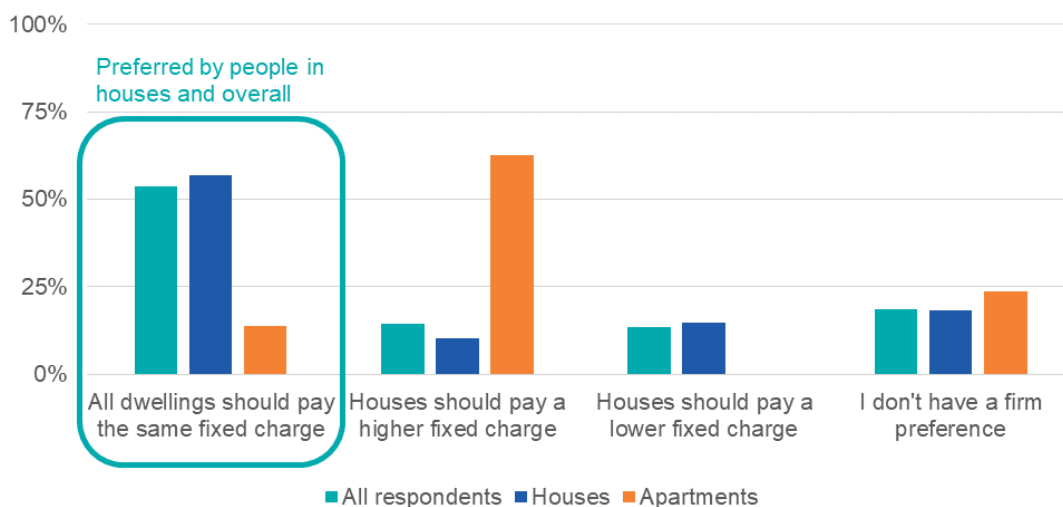
Wastewater service charges are made up of two parts - a fixed part based on the water meter and an allowance for discharge of up to 120 kL per year. Customers in houses currently pay more than customers in individual flats (or apartments). We are slowly adjusting these prices to match.

Customers in houses currently pay \$789.18 per year. That's around \$263.06 per four-monthly bill, depending on the number of days in the billing cycle.

Customers in individual flats (or apartments) pay \$730.00 per year. That's around \$243.33 per four-monthly bill, depending on the number of days in the billing cycle.

We have previously asked our residential customers whether the fixed component of a wastewater bill should be the same for all residential customers (for both the owners of houses and apartments). Not surprisingly, customers in a house preferred a common charge, around 80% of wastewater residential customers. Customers in an apartment preferred a separate, lower charge. Overall, just over half of customers indicated a preference for the owners of houses and apartments to pay the same fixed charge.

Figure 4.1 – Customer preferences for residential fixed wastewater charge

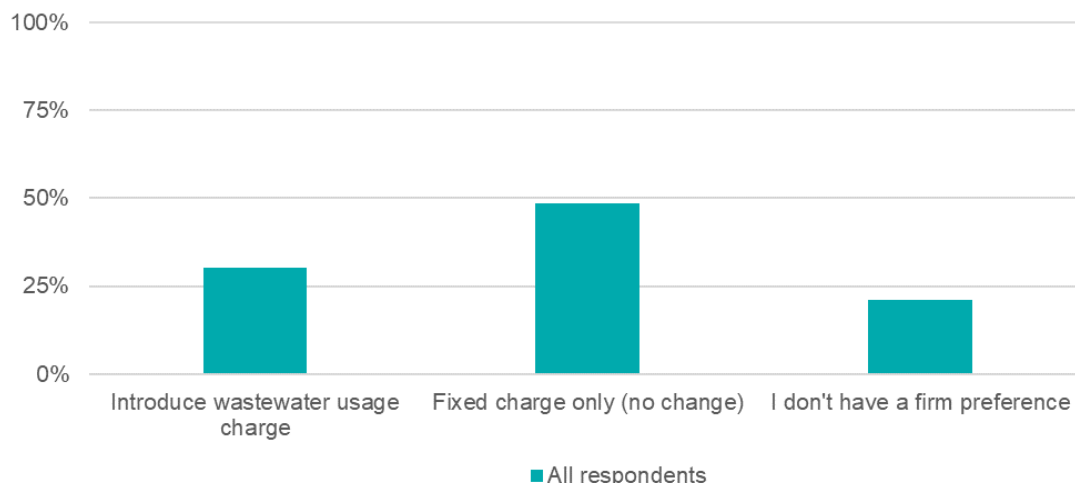


Understanding prices and charges



We also surveyed our residential customers on whether they think the wastewater part of their bill should include a usage charge. Around half of respondents preferred a continuation of the current wastewater structure with only a fixed charge. Only 26% indicated that an explicit usage charge should be introduced.

Figure 4.2 – Customer views on the introduction of a wastewater usage charge



Stormwater charges



Stormwater (drainage) bills for households and businesses are based on land area

We operate, manage, and maintain our stormwater networks in parts of Newcastle, Lake Macquarie and Cessnock local government areas. Generally, we own the large, concrete stormwater drains while the relevant Councils own and are responsible for the smaller drains. Only properties located in the catchments of Hunter Water's stormwater drains pay drainage charges. That's around one third of the number of customers receiving water and/or wastewater services from us. Some of our customers may receive a stormwater drainage charge from both Hunter Water and their local Council.

Stormwater drainage (hereafter 'stormwater') charges are fixed annual amounts for different customer categories.

Residential customers are charged according to property type, whereas non-residential customers are charged based on land area. Some large undeveloped properties, such as parks, sports fields and golf courses, have greater ability to absorb stormwater flows than developed properties with hard surfaces. Where appropriate, these properties are classed as low impact properties and pay a low impact charge. IPART introduced a similar low impact category for the owners of houses for which only a small proportion of stormwater leaves the property.

Customers in houses currently pay \$97.04 per year. That's around \$32.35 per four-monthly bill, depending on the number of days in the billing cycle.

Customers in individual flats (or apartments), as well as households that can demonstrate they have a low impact on stormwater drainage pay \$35.91 per year. That's around \$11.97 per four-monthly bill, depending on the number of days in the billing cycle.

What does the fixed wastewater service charge cover?

“ The pipes, pumps and treatment plants that we use to handle your wastewater are worth over \$1 billion. Customers need to fund this regardless of whether the infrastructure is used. ”

The fixed wastewater service charge covers the costs of transporting the wastewater from your home to Hunter Water's treatment plants, treating it to remove harmful contaminants, reusing nutrients in biosolids and safely discharging clean water to the ocean or to inland rivers or creeks, depending on the location of the nearest treatment plant.

Wastewater, also known as sewage, is the water and anything that is added to it that comes from your sinks, bathrooms, showers, toilets and laundry that is discharged to Hunter Water's system.

Hunter Water has over 5,000 kilometres of wastewater pipes connecting customers to treatment plants. Stretched end-to-end, this underground, and unseen, network would run from Newcastle to Perth and back to Kalgoorlie. The wastewater pipe network requires ongoing maintenance, repair and renewal. As the pipes age, they can crack and deteriorate and eventually require replacement or relining. The wastewater system also suffers regular blockages because of inappropriate disposal of materials, such as wet wipes, and most frequently, because of tree root invasion of the pipes. On average our work crews clear around 70 such blockages every week .

Most of the wastewater discharged by homes and businesses has to be pumped through the pipe network to the treatment plants. We have more than 440 pumping stations throughout our wastewater network so another major cost of providing our wastewater service is maintenance of these pumps and the cost of electricity to run them.




























The wastewater pipe network delivers the wastewater to 19 wastewater treatment plants. Complex biological and chemical processes are used to remove the contaminants and disinfect the remaining clear water before it is discharged to the ocean or to a local creek or river. Where opportunities exist, this remaining clean water is also recycled to industry, agriculture and other uses like golf courses. Treatment processes are also heavy users of electricity for transfer pumps within the treatment plant, compressors and aerators, rotating screens and agitators, solids drying and disinfection using ultraviolet light. These processes are all vital to ensuring that the effluent discharged by Hunter Water's treatment plants meets both the high environmental standards set by the NSW Government and the community's expectations.

In addition to covering the above costs, the fixed wastewater service charge covers other financial costs such as depreciation on the assets involved and interest on the borrowings used to fund the construction of the network and treatment plants, renewal of the assets as they wear out and upgrading plant capacity as the population grows.

Understanding prices and charges



Example bills for different types of customers

Customer type	Services	Typical bill 2023-24 (per year)	Typical bill 2023-24 (4-monthly)
Pensioner household			
	Household of one or two people who own their own home, have relatively low water use (100kL per year), and receive a concession (e.g. Pensioner Concession or Veteran's Affairs)	 	\$726 \$242
		  	\$822 \$274
Small household			
	Household of one or two people who own their own home and have relatively low water use (110kL per year)	 	\$1,135 \$378
		  	\$1,171 \$390
Medium household			
	Household of three or four people who own their own home and have average water use (180kL per year)	 	\$1,337 \$446
		  	\$1,434 \$478
Large household			
	Household of five or more people with a big garden and/or pool, who own their own home and have high water use (290kL per year)	 	\$1,655 \$552
		  	\$1,752 \$584
Medium business			
	Medium business with higher water uses e.g. a cafe, hairdresser or garden nursery (360kL per year)	 	\$4,316 \$1,439

Note: Example bills are rounded to the nearest whole dollar.

What has been done already?



The Lower Hunter Water Security Plan

The Lower Hunter Water Security Plan (LHWSP) charts a course to improve water security in our region by both reducing drinking water use and increasing supply through new water sources.

Implementation of the LHWSP will result in a secure water supply for the Lower Hunter to 2060 and beyond.

Between 2019 and 2021, we consulted with our communities and customers about their values and preferences for our water future, looked at the data on our changing climate, and the expected growth of the region, and analysed a range of demand and supply options to reduce the amount of drinking water we use and to supplement our water supplies. The culmination of this extensive body of work was the release of the whole of government Lower Hunter Water Security Plan in April 2022.

The LHWSP sets out the actions to ensure a sustainable and resilient water system, including water conservation programs, leakage reduction programs, increased recycling and source augmentations, including a permanent desalination plant at Belmont, and progress on a connection to the Upper Hunter water system. The plan also includes a robust drought management plan to ensure that we meet minimum water supply needs for the community in the event of a severe drought.

The plan was informed by our community's values and preferences that have been understood from an extensive community engagement program. Across three phases of engagement through workshops, focus groups, surveys, community drop-in sessions, and face to face in depth discussions with stakeholder groups we learned:

- community values and aspirations, and the community's stance on drought water restrictions
- community views on supply and demand side options, and preferences for portfolios of options and
- how the community trades off objectives.

LOWER HUNTER WATER SECURITY PLAN ENGAGEMENT OVERVIEW



What has been done already?



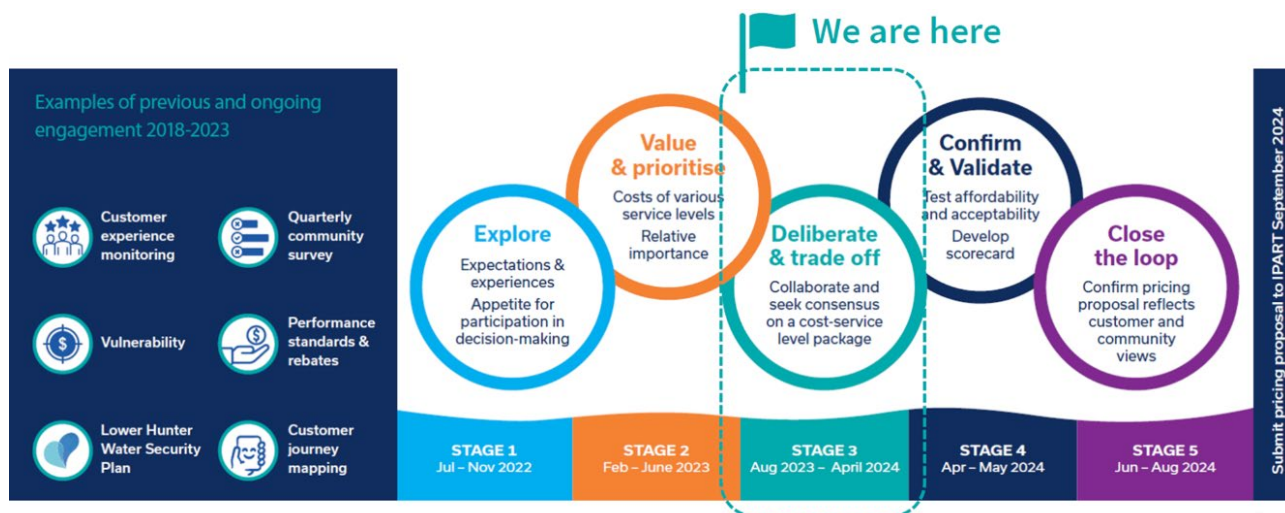
Overview of engagement for this pricing proposal

Our comprehensive customer and community engagement to inform our pricing proposal is being conducted across multiple stages over two years in a way that is representative, reliable and valid. The process aims to balance customer, community and environmental needs.

This program builds on the extensive community engagement we have conducted previously to inform our decision-making.

Each stage of engagement deepens our understanding of what's important to our customers and community and what their priorities are. We have put a lot of thought into the barriers that prevent people from participating, whether they be economic, language, ability or just because engagement used to happen on our terms. Our approach is tailored to both the topics and the different engagement preferences of our customers, community members, peak bodies, and stakeholders.

An overview of the engagement program is provided below.



We are now in the third stage of our journey, where we're asking you to collaborate with us to make recommendations for the benefit of the entire region, including customers, community, and the environment.

The graphics below show what we did during the first two stages of our engagement. The findings from these stages, as well as insights from other community research, are provided in the Appendices of this document. More detailed information regarding the engagement program and the methods and techniques used is provided in the '2025-2030 pricing proposal customer and community engagement process' section in Appendix D, starting on page 81.

What has been done already?



Stage 1 activities



Stage 2 activities



At the conclusion of our community engagement, we will have robust insights, informed by multiple lines of evidence, regarding how much people are willing to pay for the experiences they want, and what their priorities are.



What has been done already?



Outcomes valued by customers

At Hunter Water, we think it is important to understand the experiences and outcomes that customers value. We developed a set of draft customer outcomes based on all of the research we have conducted since 2018.

These six statements were tested and refined in stage one of our engagement for our pricing proposal. Insync used a storytelling methodology at six community listening post workshops involving 96 people from across all the local government areas that we service, where everyday customers revealed their expectations through anecdotes of when Hunter Water had delighted and disappointed them. The stories that people told in the listening posts also provided the chance to delve beneath the general, and detail the lists of experiences, interests, concerns and priorities that our customers expect.

As a customer I expect Hunter Water to provide ...

HIGH QUALITY WATER SERVICES

Customers expect the water to be clean, transparent and without a noticeable odour or taste. Water and wastewater services should be reliable, infrequently interrupted so that they can do what needs to be done during all weather conditions.

VALUE FOR MONEY, and be AFFORDABLE

Customers expect us to keep bills as low as possible by being efficient and looking for ways to save money. They want us to treat consumers experiencing vulnerability with dignity, and make it easy for them to get appropriate assistance

WATER SECURITY

Customers want us to plan ahead and use water resources wisely so that we have enough water to support the health and prosperity of our region, now and in the future, no matter the weather.

GREAT CUSTOMER EXPERIENCE

Customers want to be able to access clear, accurate information via their preferred channel, which would help them resolve their issue themselves. They want their issue resolved quickly and to be kept informed.

As a customer I expect Hunter Water to be ...

SUSTAINABLE

Customers expect us to care for the environment: protecting it during our current operations (e.g. not harming waterways when we discharge treated wastewater), 'treading lightly on the planet' and being fair to future generations by acting on big challenges like climate change

COMMUNITY-FOCUSED

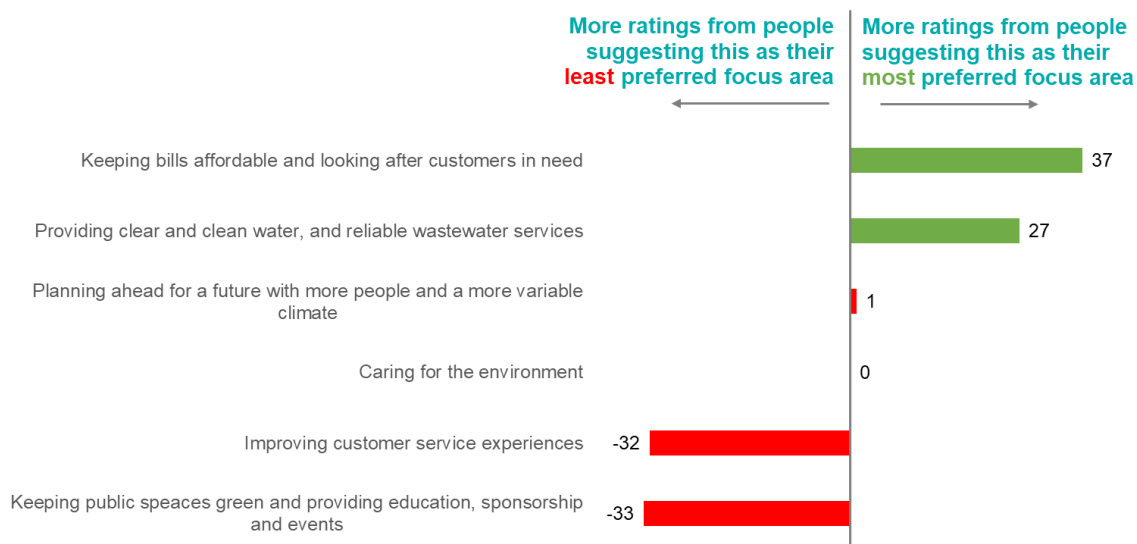
Customers want us to provide water to keep our area liveable and green, raise awareness about the water cycle, support community groups and be open to feedback.

To get an indication of which outcomes are most important, 218 people were presented with a description of the draft outcomes in our quarterly community survey. They were asked to select the outcome most important and least important to them.

What has been done already?



Figure 5.1 - Quarterly Community Survey – August 2023 (218 participants)



Scores presented are the net score of 'most focus' ratings minus the proportion of 'least focus' ratings

“Keeping bills affordable and looking after customers in need” and “providing clear, clean water, and reliable wastewater services” received the strongest support and low levels of opposition.



What has been done already?



How much of a say are you being given in this Community Panel?

We have aligned our approach with the International Association for Public Participation (IAP2). The Public Participation Spectrum helps to define the scope of the community's input and their level of influence on the decision-making process. As you move to the right of the Spectrum there is an increase in public participation and impact.

Based on the IAP2 framework, our commitment for the deliberative forum is to **COLLABORATE** with you.

This means that we will look to you for advice and innovation and will incorporate your advice and recommendations into decisions to the maximum extent possible.

IAP2 Spectrum of Public Participation

	Increasing level of public impact				
	Inform	Consult	Involve	Collaborate	Empower
Goal	To provide balanced and objective information in a timely manner.	To obtain feedback on analysis, issues, alternatives, and decisions.	To work with the public to make sure that concerns and aspirations are considered and understood.	To partner with the public in each aspect of the decision-making.	To place final decision-making in the hands of the public.
Promise	"We will keep you informed."	"We will listen to and acknowledge your concerns."	"We will work with you to ensure your concerns and aspirations are directly reflected in the decisions made."	"We will incorporate your recommendations to the maximum extent possible, and provide reasons where we are unable to do so"	"We will implement what you decide."
Examples	The organisation will put a flyer in your letter box and put updates on its website.	The organisation will utilise a survey and/or display the plans at a community event.	The organisation will run some focus groups and workshops, and/or some in-depth interviews.	Comprehensive exploration using multiple techniques, followed by 4 to 6 days of deliberation	Citizen's jury.

Your role

Your role as a panel member includes both listening and contributing. As a panel member you will:

- have access to a range of information and hear from speakers who are subject matter experts
- discuss the issues and ideas with your fellow panel members and weigh up all of the evidence and information presented to you
- agree on the final recommendations which will be presented back to Hunter Water to incorporate to the maximum extent possible.

The challenge



We are asking customers and the community to lead the conversation for our 2025-2030 pricing proposal.

You are one of a representative group of our customers and community members that have been selected for the Community Panel to help us answer the following question:

Our challenge

Hunter Water's costs of providing water services are increasing.
These higher costs will be passed on to customers through increased prices.
We are also faced with some important decisions that will impact customer bills.

How do we balance providing reliable, high-quality services while protecting the environment, and creating a positive legacy for future generations, and keeping prices affordable?

Our current situation

The price of delivering water and wastewater services is rising. In coming years, it is going to be more expensive to provide the same levels of service our community has come to expect.

Increased cost for Hunter Water to deliver its current service levels

The costs of the materials we use to build and fix things are going up, as well as costs that impact us all like rising electricity costs. For example, over the past few years, the price to maintain our grounds has gone up by 172%, the costs to maintain our valves has gone up 24% and the costs to undertake some of our classifications and assessments have risen by 34%.

Increased cost of living expenses

Increasing costs of living is impacting us all.

During COVID, supporting our customers that were struggling to pay became a significant focus for Hunter Water. Three years down the track we are once again seeing an increase in customers seeking support and concern about affordability, driven by:

- household debt that is sensitive to interest rate rises, intensifying challenges in meeting mortgage repayments on time
- high inflation, with growing costs of food and other everyday essentials
- increases in electricity costs and fuel prices.

Our Lower Hunter community has a higher proportion of lower income earners and far fewer high-income earners relative to Greater Sydney. In our area, 38.6% of the population receives a form of pension, compared to just 22.7% in the Greater Sydney region.

The percentage of customers struggling to pay their water bill (or another bill) on time has increased by 10% in the past 12 months, based on our quarterly survey data. Over 41% of our customers are just, or not, making ends meet.

The challenge



The number of our customers in assistance programs has increased from 740 pre-COVID to a peak of 1,520 during COVID. The number is currently around 1170 and 37% higher than pre-COVID levels. The number has continued to increase by 60 customers per month (5%) over the last three months.

Cost of living challenges are expected to continue for at least the next 12 months. However, customers may continue to experience cost of living challenges well beyond that point.

We will continue to support our customers by keeping bills as low as possible and offering support to those customers in need. Water is essential for life, and a fundamental right for everybody.

A more variable climate

Many of our critical assets are susceptible to the impacts of climate change, such as rising sea levels. We need to ensure we respond to this challenge by preparing to adapt to greater climate variability and consider reducing our carbon footprint.

A growing population

Our population is forecast to grow by more than 20% over the next 20 years. Safe and reliable water services underpin this growth, delivering the right solutions at the right time to support liveable communities and enable regional prosperity.

The diverse and changing needs of our customers & community

We've been talking with our customers and community to understand what's important to them. We'll continue to seek out these views, and those of our stakeholders, to make sure we add value to the areas that matter most.

Digital disruption

The fast pace of digital change brings opportunities to enhance customer experience, increase efficiencies and transform the way we work. It also brings new risks to our business, such as cybersecurity threats, that we need to be prepared for.

Intergenerational equity

It is incumbent on us to meet the needs of the present an important role in progressing the United Nations Sustainable Development Goals (UN SDGs). There is more information about UN SDGs in Miromaliko Baato: Our Corporate Strategy.

Our Lower Hunter Water Security Plan describes the challenges we face to secure our water future and the actions we are taking to address them. Head to <https://www.hunterwater.com.au/our-water/water-supply/water-in-the-lower-hunter/lower-hunter-water-security-plan> for more information about the impacts of climate change, a growing population and the need to have an adaptive plan for an equitable water future.

What is in scope for your discussions?

What you can influence

Whether we should provide levels of service over and above our required minimum standards.

The customer outcomes that will form a central component of our pricing proposal.

Our response to our challenge of providing reliable, high-quality services:

- Relative priorities in fixing the three main types of ongoing issues that affect a small number of (2,000 to 3,000) customers:
 - A. Persistent low water pressure,
 - B. Frequent or ongoing wastewater overflows, and
 - C. Persistent bad smells?
- How much we invest in this issue, keeping in mind that all of our customers share the burden equally in their Hunter Water bills?

Our response to our challenge of protecting the environment:

- When we achieve net zero carbon emissions, how much we reduce our carbon emissions by 2030 and how much we invest in this issue.

Our response to our challenge of providing reliable, high-quality services by making sure there is enough water for today and tomorrow:

- Relative priorities between the four main ways to conserve our drinking-quality water:
 - A. Encouraging customers to use less water and reduce their leaks
 - B. Reducing leaks from Hunter Water's system
 - C. Using recycled wastewater or stormwater for industry instead of drinking quality water
 - D. Using recycled wastewater or stormwater for community greening (parks and sporting fields) instead of drinking quality water.
- How much we invest in this issue, keeping in mind that anything we can do more cheaply than the value of water, we are already doing and are required to keep doing by NSW government regulations.

The subject matter experts who come to the forum to share their knowledge and opinions. In addition to asking to hear from specific types of people, you can also ask for more information.

What is out of scope for your discussions?

What you can't influence	Why not?
Laws we need to comply with.	Laws are laws.
The geographic areas we service, including 'backlog' services to extend water or wastewater (sewerage) services to existing properties that aren't currently serviced.	Our area of operations is legislated.
The amount of profit we generate and pay to the NSW Government.	This is set by the shareholder. NSW Government policy.
Who owns Hunter Water and how the business is structured. Hunter Water has been protected from privatisation through changes to legislation (an amendment to the <i>Constitution Act (NSW) 1902</i>).	NSW laws and regulations. NSW Government policy.
The total revenue we can earn through customer prices and bills. This is determined by IPART, based on the costs of efficiently providing our services.	NSW laws and regulations. NSW Government policy.
Reducing the minimum levels of service provided to customers. These are set out in our Operating Licence.	NSW laws and regulations.
Pre-committed investments that are considered essential. Examples include: <ul style="list-style-type: none"> Water supply options included in the Lower Hunter Water Security Plan (LHWSP) Actions we need to take to ensure water is safe to drink. Actions we need to take to meet environmental legal requirements. 	Already decided by customers and adopted by Hunter Water Board of Directors and NSW Government.
The minimum level of drinking water treatment we undertake to ensure we meet public health standards and protect our community.	NSW laws and regulations.
How our prices are structured (e.g., the mix of fixed and variable charges).	We did a lot of work for the last price review to understand customer preferences and balance that against other factors like cost reflectivity and customer impacts. Some of the changes have been made slowly and the transitions are only just finishing.
Rebates available to pensioners, including the dollar rebate amount and eligibility. This is funded by the NSW Government.	NSW Government policy.
How we run our organisation, including the number of employees and their wages and salaries.	Reviewed by IPART.
How we dispose of wastewater, aside from the recycled wastewater discussed under "what you can influence".	The quality of treated wastewater that we discharge to the environment, where and when it is discharged is set by the NSW EPA.

The challenge



What you can't influence	Why not?
Adding fluoride to drinking water to help prevent tooth decay in the community.	NSW laws and regulations.
Irrigation and providing water to farmers. While we provide recycled wastewater to some farms, the function of providing appropriate quality water for use on farms is predominantly provided by Water NSW.	Not our role done by Water NSW.
Helping farmers manage natural resources.	Not our role done by Local Land Services.



PART TWO



Potential relative size of the decisions

There are three key topic areas for the panel to consider in the light of what is best for the whole community, including those who are already struggling to make ends meet. Across these topic areas, we are asking for the panel's recommendation on 15 questions. Your recommendations can change the annual revenue that we collect to recover our cost by \$0 million to tens of millions.

In the following scenarios when we refer all customers sharing a cost burden, we mean those people in the community who pay Hunter Water bills.

Our challenge of providing reliable, high-quality services:

- How important is the issue of hot spots, and why?
- How we prioritise fixing ongoing issues that affect a small number of customers: persistent low water pressure, frequent or ongoing wastewater overflows and persistent bad odours? Should we fix the cheapest first or the worst first?
- What should we do where it costs about as much to fix a hot spot as the affected property is worth?
- Approximately how much should we invest in this issue?
- What should Hunter Water keep in mind when addressing the issue of hot spots?

Hot spots



Our challenge of protecting the environment:

Based on decisions made so far, our total carbon emissions (scope 1 and 2) will reduce by 75% by 2030 (compared to 2020-21 levels).

- How important is the issue of our carbon emissions?
- When should we achieve Net Zero (scope 1 and 2) carbon emissions?
- How much should we reduce our carbon emissions by 2030?
- Approximately how much should we invest in this issue?
- What else should we keep in mind when addressing the issue of carbon pollution reduction?

Carbon reduction



Our challenge of providing reliable services by making sure there is enough water for today and tomorrow:

There are four main ways to conserving drinking quality water for drinking purposes:

- A. Encouraging customers to use less water and reduce their leaks
- B. Reducing leaks from Hunter Water's system
- C. Using recycled wastewater or stormwater for industry instead of drinking quality water
- D. Using recycled wastewater or stormwater for community greening (parks and sporting fields) instead of drinking quality water

- Is it ever appropriate to pay more to save water than that water is worth? When, and with what conditions?
- What are the relative merits of each of the four options for conserving drinking water?
- Which of the four options do you prefer, and why?
- Approximately how much should we invest in this issue? (Keep in mind that anything we can do more cheaply than the value of water, we are already doing and are required to keep doing by NSW government regulations).
- Should households subsidise recycled water to make it attractive for industrial uses (in order to conserve our drinking water and reduce the likelihood of restrictions)?

Conserving water



Background

Some customers receive poor service at times. Most customers understand that problems can happen and accept being inconvenienced occasionally. We provide rebates as a discount on bills to affected customers. These are intended to signal 'fair play' and are set out in our Customer Contract. Rebates range from \$58 to \$809 depending on the type of problem experienced. For example, a customer who experiences low water pressure will receive \$58 off their bill once per year. The amount is the same regardless of whether they have low water pressure on one day or every day.

There are a small number of customers, often in clusters, who are repeatedly affected by a service problem. We refer to these areas as hot spots.

It is difficult to decide the right thing to do about these hotspots for the following reasons:

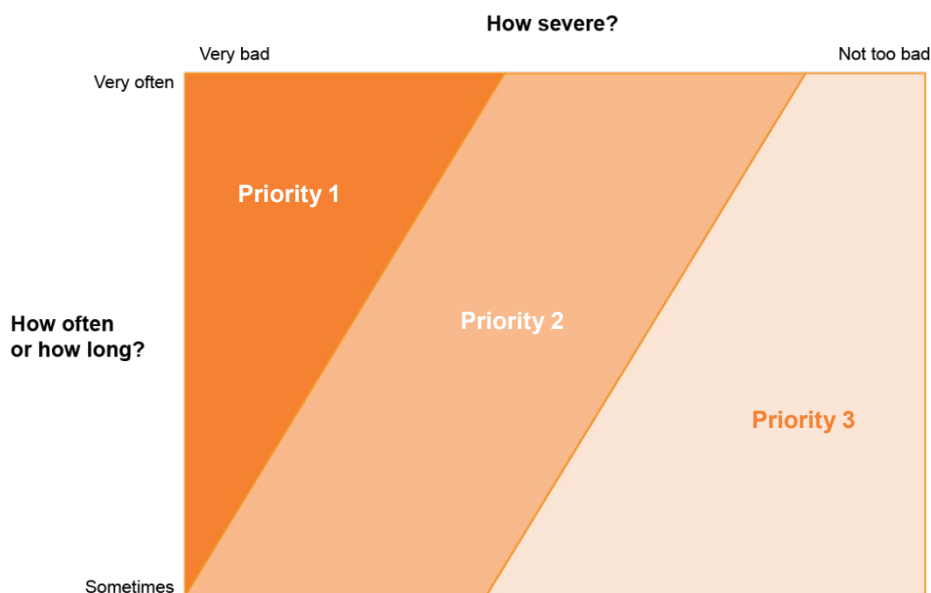
- NSW Government regulations generally set service performance standards around the maximum number of customers that can experience a service problem in a year. Therefore, if we don't exceed that maximum number, there is no regulatory requirement to fix the problems.
- it is difficult to work out who, if anyone, caused the problem.
- issues can cost a lot to fix, and all customers would share the costs. When we say "a lot", in some cases it could be cheaper to buy the house than to fix the problem
- Sometimes it's hard to find a solution that we know will work, because it's hard to work out what the root cause is or to fix that. We might need to trial several different solutions.
- we probably won't ever get to a point in time when we can say we've fixed all hot spots. As more customers connect to our services, we design the new infrastructure so that it doesn't cause existing customers any problems but sometimes there are unpredicted consequences.

There are three main types of hot spots that affect our customers:

- low water pressure
- wastewater overflows in wet weather
- bad odours.

We use priority categories to group customers based on how "unpleasant" their problem might be. The priority category considers how bad the problem is when it happens and how often it happens. We do this across all types of hot spots. As an example, a priority 1 customer may:

- receive very low pressure on a normal day, and no water on a hot summer day; or
- have a wastewater overflow inside or outside their house due to storms that happen two to four times per year; or
- have bad smell inside their house every day.



Low water pressure

Poor water pressure tends to repeatedly impact the same small areas or individual customers, but the affected properties are spread out across the region. We can improve poor water pressure by making operational changes, or adding extra reservoirs, pipes or pumps to the network, which can be expensive.

Wet weather sewer overflows

Hunter Water is required to safely and reliably collect wastewater from homes and businesses, transport it to a wastewater treatment works and discharge the treated wastewater in a way that protects the environment and human health.

The wastewater journey begins when the sewage flows through the customer's house drainage system to the customer's sewer shaft. The sewer shaft is where the customer's responsibility ends and Hunter Water's responsibility begins. The sewage then flows via gravity through a network of small diameter pipes progressively moving into larger pipes. Most of this journey happens by gravity but when there are hills we need to add pumps to help move the wastewater.

In an ideal world, the only thing that gets moved in the pipes would be wastewater. However, in reality, other water can get into the pipes and need to be moved too. This extra water can get into the sewer from rainfall or stormwater being illegally connected to the sewer pipes, or rainfall running into joins in the pipe or cracks caused by tree roots. This means that the amount of wastewater that needs to be moved in wet weather is between 7 and 20 times more than in dry weather. If we designed all wastewater pipes for wet weather we'd have huge pipes! Instead, engineers come up with a compromise and mainly size the pipes for dry weather and some rain from wet weather. In some places, during different types of storms, there's too much water to fit in the pipes and the wastewater overflows to the surface. Where this happens depends on a lot of factors.

Odours

As the wastewater travels through the system, a natural biological process is occurring that generates odorous gases that would commonly be described as smelling like rotten eggs. The odours can smell worse during periods of dry and hot weather, or when wastewater flows are lower.

Customers who live next to wastewater pump stations and wastewater treatment works are more likely to be affected by bad smells more than other people, but people in the surrounding area could smell a bad smell depending on which direction the wind is blowing.

We are planning to fix some hot spots between 2025 and 2030 where there wouldn't be an impact on other customers' bills. We plan to fix problems for 94 customers, based on fixing the cheapest and easiest to fix problem first:

- 84 low water pressure customers receiving better water pressure (about 4% of customers experiencing these issues). All of these customers are priority 2 and 3.
- five customers with wet weather overflows
- five customers regularly getting bad smells.

We would like to know if the community would prefer us to fix more and if so, how we should decide the order.

There are two approaches to deciding the order in which we address the problems, described below.

A. Helping the most customers for the least amount of money

This option involves fixing the cheapest and easiest to fix problem first, regardless of whether the issue is priority 1, 2 or 3 (P1, P2 or P3). As an example, we can improve water pressure for some customers for \$5,000 per property, but others might cost \$30,000 per property or even up to \$300,000 per property. Depending on how much the community is prepared to pay, we'd start by fixing the water pressure problems for customers where it costs less than \$5,000 to fix. This would improve services for some priority 1, 2 and 3 customers but not all priority 1 customers.

Table 9.1 shows an estimate of how many problems we could fix for different amounts of revenue. During the forum sessions, we will help you to understand how this amount of expenditure would impact on customer bills.

Table 9.1 - Example options that help the *most* customers

	Option A.1 (\$1.2 million)	Option A.2 (\$2.6 million)	Option A.3 (\$4.5 million)
Low water pressure	575 customers This is 30% of P1, P2 and P3 customers. This is 30% of total customers with low water pressure.	767 customers This is 60% of P1, 35% of P2 and 30% of P3 customers. This is 40% of total customers with low water pressure.	1,150 customers This is 75% of P1, 60% of P2 and 40% of P3 customers. This is 60% of the total customers with low water pressure.
Wet weather wastewater overflows	20 customers This is 50% of P2 and P3 customers. This is 25% of the total customers with wastewater overflows.	52 customers This is 45% of P1 customers and 75% of P2 and 3 customers. This is 60% of the total customers with wastewater overflows.	63 customers This is 45% of P1 customers and all 43 P2 and P3 customers. This is 72% of the total customers with wastewater overflows.
Odours	260 customers, This is 5% of P1 customers, 30% of P2 and 20% of P3. This is 20% of the total customers with bad smells.	520 customers This is 30% of P1, 50% of P2 and 40% of P3. This is 40% of the total customers with bad smells.	770 customers, This is 50% of P1, 80% of P2 and 60% of P3. This is 60% of the total customers with bad smells.
Total number of customers helped	855	1,339	1,983

Notes: Percentages are rounded to the nearest 5%. \$million, \$2023-24 revenue requirement impact.

B. Helping the customers in priority order

This option involves fixing the customers experiencing the worst service first. Depending on how much the community is prepared to pay, we would fix as many priority 1 issues as we can. We would then work our way through priority 2 issues before fixing priority 3 issues.

Table 9.2 shows an estimate of how many problems we could fix for different amounts of revenue. During the forum sessions we will help you to understand how this amount of expenditure would impact on customer bills.

Table 9.2 - Example options that help the *worst affected* customers

	Option B.1 (\$0.4 million)	Option B.2 (\$1.3 million)	Option B.3 (\$3.9 million)
Low water pressure	159 out of 511 P1 customers (30%). This is 8% of total customers with low water pressure.	395 out of 511 P1 customers (77%). This is 21% of total customers with low water pressure.	All 511 P1 customers. This is 27% of the total customers with low water pressure.
Wet weather wastewater overflows	20 out of 45 P1 customers (44%)	35 out of 45 priority 1 customers (78%)	All 45 P1 customers
Odours	10 out of 19 P1 customers (55%)	15 out of 19 P1 customers (79%)	All 19 P1 customers
Total number of customers helped	189	445	575

Notes: Percentages are rounded to the nearest 5%. \$million, \$2023-24 revenue requirement impact.

What is in scope for your discussions?

What you can influence on this topic	What you cannot influence on this topic
How we prioritise fixing these issues for affected customers. That is, do we help the most customers by fixing the cheapest first or help the worst affected customers.	How we group customers as priority 1, 2 or 3.
Approximately how much we invest in this issue.	How much we spend on other issues that may cause repeated problems for some customers (e.g. discoloured water, drinking water taste and odour, long or frequent water interruptions).
	Fixing bad smells that don't come from Hunter Water's infrastructure or operations, for example, those that come from stormwater drains, wetlands or lakes.
	The level of water pressure we count as "low" (<20m). This is set in our Operating Licence and Customer Contract, issued by the NSW Government.

Customer and community views

Most of the community suggested a preference for spending extra money on this topic. The preference was to help the worst affected people rather than the most people. Not being able to use water in the house after rain was judged to be the worst type of hot spot, followed by having low water pressure. Although most people expressed a willingness to pay to fix some hot spots, there was no agreement about how much to pay. To properly consider what the community wants you'll need to review [Appendix A](#), because people who are struggling to make ends meet (and others) have different views on this topic.

Thought starters from our research partner

- How bad are these issues, really?
- Which type of issue should Hunter Water prioritise (pressure, odour or spills)?
- Should it prioritise the worst affected customers, or should it prioritise the cheapest ones to fix (keep in mind that some of the worst affected customers might also be fairly cheap to address)?
- To what extent should we consider the Bill Simulator responses?
- Were people in the focus groups affected by social desirability bias?
- Is there socially desirable response (something that a "good person" is meant to say/feel)? If so, are we unconsciously "playing nice"?

Note: These questions have been carefully designed to avoid framing or starting point bias but please employ your critical thinking skills nonetheless.



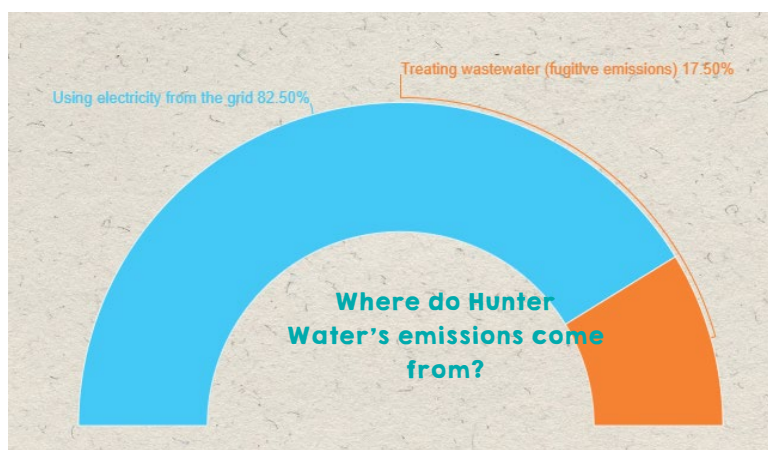
Topic 2: Carbon reduction



Background

Water utilities are large producers of greenhouse gas emissions and overall these emissions have been steadily rising over time with population growth and the use of more energy intensive infrastructure. There are two main sources of greenhouse gas emissions from the water and sewerage services you use:

1. Emissions from the process of treating the wastewater that comes from your home and fuel consumption used in our vehicle fleet and pump stations. These are 'direct' emissions, also referred to as Scope 1 emissions.
2. Emissions from the generation of the electricity Hunter Water draws from the grid to treat and pump water to your home and pump and treat wastewater that comes from your home. These are 'indirect' emissions, also known as Scope 2 emissions.



Hunter Water emits more than 80,000 tonnes of greenhouse gases annually (scope 1 and scope 2). This is equivalent to around 18,000 passenger vehicles being driven for a year. While this sounds like a big number, we aren't the biggest emitter in the water industry and aren't the biggest emitter in New South Wales.

Greenhouse gas emissions are the main driver of climate change, which will affect everyone. We are already working to adapt to climate change and improve energy efficiency.

Greenhouse gas emissions are a problem because they are the main driver of climate change. The effects on Hunter Water operations, our customers, and the community are expected to worsen as climate change continues. Impacts to our operations include inundation of our low-lying assets due to sea level rise, and more intense droughts, bushfires and storms.

To limit climate change to a manageable level, the Intergovernmental Panel on Climate Change (IPCC) has said that the world's carbon emissions will have to be net zero by 2050. In Australia an independent climate research organisation, the Climate Council, recommends Australia reach net zero emissions by 2035. To make a difference to climate change it will take the whole world working together. We are already planning our investments and operations to adapt to climate change.

Reducing emissions is not always expensive, but reducing them to zero is likely to involve some additional cost.

There has been a lot of discussion in the news regarding climate change, and what Australia, New South Wales, and individual organisations should do to limit climate change to a manageable level.

The Australian government's greenhouse gas emissions target is to reach net zero by 2050 with an interim target to reduce emissions by 43% (relative to 2005) by 2030. The Federal government is aiming to have 82% of electricity generation to come from renewables by 2030. The NSW government also has a target to achieve net zero by 2050 with interim targets to reduce its emissions by 50% relative to 2005 levels by 2030, and 70% by 2035. The NSW government is proposing to legislate these targets.

Topic 2: Carbon reduction



Based on decisions to date, we will reduce our scope 1 and 2 carbon emissions by 75% by 2030. This figure includes power for our new desalination plant, which is scheduled to start producing water in 2027.

We need customers input to help us decide when to reach net zero because:

- Our customers have told us they want us to be a sustainable water utility and some are supportive of paying a little more for us to invest to reduce our carbon footprint (however other changes to bills between now and 2030 weren't fully known).
- Our customers and community are feeling the challenges of cost of living pressures, including increasing electricity costs. Reducing emissions is not always expensive, but reducing them to zero is likely to involve some additional cost.

We need your help to answer the following questions:

- When should we achieve Net Zero (scope 1 and 2) carbon emissions?
- How much should we reduce our carbon emissions by 2030?
- Approximately how much should we invest in this issue, keeping in mind that all of our customers share the burden equally?

The more quickly Hunter Water reduces its carbon emissions, the more it would have to rely on indirect actions

There are a couple of ways that we could further reduce our scope 1 and scope 2 emissions:

- A. Buying renewable energy from the grid to power the planned desalination plant from 2027
- B. Carbon offsetting.

We are already doing everything we can to be energy efficient, generate cost-effective renewable energy on land we own, and transitioning to a low emissions vehicle fleet as it become economically viable over time.

A. Buying renewable energy from the grid to power the planned desalination plant

Hunter Water can further reduce our carbon emissions by purchasing grid electricity solely sourced from renewable energy projects.

B. Carbon offsetting

There are currently no viable technology solutions available to reduce direct (scope 1) carbon emissions generated from our wastewater treatment plants. Along with fuel consumption in our vehicles, these make up around 20% of our total carbon emissions. Until technology becomes available, Hunter Water will need to rely on offsets to reduce these emissions.

We can compensate for our emissions by doing things that remove emissions from the atmosphere or investing in projects that would avoid, reduce, or capture emissions generated by others. This is called carbon offsetting. We can do this by:

- a. Planting trees on land we own that is currently leased for agriculture (grazing).
- b. Buying offsets, which means investing in projects done by other people or organisations.

The options above do not include emissions from our supply chain, referred to as our scope 3 emissions.

What is in scope for your discussions?

What you can influence on this topic	What you cannot influence on this topic
Timeframe to achieve net zero (scope 1 and 2) emissions.	Climate change adaptation – planning for assets and future uncertainty caused by climate change. We will continue to do this.
Emission reduction goal for 2030	The amount of renewable energy for our current operations (excluding our new desalination plant). We have already signed a contract to purchase 100% renewable energy.

Customer and community views

Most people agree that there should be further investment in reducing carbon emissions, and the preference was to do so with renewable energy projects anywhere in NSW. However, this wasn't the case for people who are struggling to make ends meet, and would be most affected by bill increases. On the topic of how quickly to achieve net zero there is no real community consensus, and there are some big differences between groups in society. Thousands of people have made their views known on this topic. These people want to influence your thinking, and want their voices heard, so please review [Appendix B](#) for more details.

Thought starters from our research partner

- In the Bill Simulator why wasn't there an option to reduce expenditure?
- What is the best value way of reducing carbon emissions?
- If we approve some expenditure, exactly what will we get for what we pay?
- When responding to the surveys, did customers know as much as you do now about reducing carbon emissions? Have your views on this topic changed as you've learned more?
- Are some groups of survey respondents better informed than others, should their views have more influence?
- Is this expenditure operational, meaning that customers pay for it in the year when the money is spent? Or is it capital expenditure, which means that the bill increase would stay on bills for decades to come?



Topic 3: Conserving water



Background

The population in our region is expected to increase by around 170,000 people over the next 20 years and we are seeing our climate changing. The Lower Hunter Water Security Plan (LHWSP) explored a range of ways to reduce the amount of water used and increase the amount of water available to ensure that we have enough water to meet the community's needs over time. The LHWSP recommendations aim to provide a secure water supply for our region to 2060 and beyond.

When we say “water security” or a “secure water supply”, it means that the community doesn’t experience restrictions on how or when it can use water too often or too long, and that our community’s minimum water supply needs are always met, even in a severe drought.

In this report when we say “water conservation”, we mean the actions we could take to reduce the amount of drinking quality water that is required (saving water).

There are four things we could do to save water, for your consideration:

- A. encouraging customers to use less water and reduce their leaks,
- B. saving water by reducing leaks from our system,
- C. using recycled wastewater or stormwater industry instead of drinking quality water, and
- D. using recycled wastewater or stormwater for community greening (parks and sporting fields) instead of drinking quality water.

Currently, there is a very small chance our region could run out of water in the event of a long, severe drought. We don’t have a climate independent way of supplying water to meet the minimum needs of the community. That’s why we’re building the permanent desalination plant at Belmont. The desalination plant will take some time to build, and to check that it’s working properly. Even with a desalination plant, water conservation activities will continue to be an important way for us to reduce the chance of our storages reaching low levels and running out of water.

A. Encouraging customers to use less water and reduce their leaks

These activities involve us working with our customers to help them save water.

We currently undertake a range of works including:

- providing plumbing assistance to residential customers experiencing vulnerability
- letting customers know when we think they may have a leak on their property
- working with non-residential customers to help them identify ways they can save water within their business and find and fix water leaks
- education programs and water conservation campaigns to help change people’s water use behaviours in and around the home
- replacing drinking quality water with other water appropriate for the end use
- working with others to look at regulations to increase uptake of water efficient appliances and regulations to make new housing developments more water efficient.

This program saves water at or below the cost of collecting rainwater, treating it to drinking quality and distributing it across the region. As the water level in our storages decrease other programs are added as they become cost effective.

However, in order to meet the water saving targets recommended in the LHWSP and reduce the chance of our storages reaching a low level, our current water conservation program would need to be expanded regardless of the overall storage levels. An expansion would involve a range of programs to help reduce residential demand, an expanded non-residential program and more education targeting all customers.

B. Reducing leaks from our system

As the pipes, reservoirs and other parts of our water network get older, they start to wear out. This can be caused by corrosion, or pressure from the water inside the pipes and reservoirs can cause cracks, and movement of the ground around the pipes can occur from changes in temperature and rainfall patterns. As these parts of the network deteriorate, they might start to develop leaks. These leaks can be small at first but if left unattended, they can become bigger and cause water to escape.

To manage the level of leakage in Hunter Water's water network we:

- make sure new pipes and reservoirs are installed to a good standard and replace them when they have reached the end of their life
- actively monitor the network so that when a leak occurs we know about it quickly
- fix leaks quickly once they have been identified
- make sure new areas of the network don't have high pressure and we reduce the pressure in existing areas of the network where it is very high.

Before the last drought, we recognised that the leakage in our network was too high. In 2015-16 we lost 12.4% of water that was supplied by our water treatment plants in leakage before it reached our customers.

Since then, we have undertaken a dedicated program to reduce leakage. In 2020-21 our rate of leakage was 8.4% and it is planned that by 2025 this will be reduced to 6.5%.

Our current program includes investment in improved leak monitoring and pressure reduction and utilises new and emerging technologies. This program saves leakage at or below the cost of collecting rainwater, treating it to drinking quality and distributing it across the region. This program could be expanded to achieve further improvements to leakage.



Using recycled wastewater or stormwater instead of drinking quality water

Recycling wastewater or stormwater usually costs more to produce/treat and distribute (\$ per litre) than collecting rainwater, treating it to drinking quality and distributing it across the region. To be clear, it is more expensive for us to recycle it than when nature does it for us.

C. Using recycled wastewater or stormwater for industry

Even though it may cost more, if business and industry use recycled wastewater or stormwater, then the demand for drinking quality water is reduced. This means that everyone benefits as there is a lower chance of our water storages reaching low levels and needing water restrictions.

Business and industry use large volumes of water and therefore, these customers using other types of water would bring the biggest benefit for everyone.

D. Using recycled wastewater or stormwater for community greening

Watering public areas to keep them green improves liveability outcomes for our community, by promoting everyone's health and wellbeing. Switching from drinking water to recycled wastewater or stormwater will keep these areas green, even during water restrictions. Things to consider are:

- recycled water is more expensive to treat and distribute compared to drinking water.
- only a relatively small amount of drinking water would be saved – not enough to make it less likely that everyone else will have water restrictions
- in some cases, the sporting fields are not watered at all, or are currently under-watered. In these situations, additional watering with drinking water may be the most cost-effective way to improve liveability for the community most of the time. However, the areas may turn brown during drought when drinking water use is restricted.
- community health and wellbeing benefits during drought have been a key issue in previous droughts.

It is difficult to work out the right amount of water conservation activities overall, and the “right” combination of the four different types of activities. For each of the activities we could do:

- A. Projects and programs where the cost of saving the water is no higher than the cost of providing the water. This would keep water prices as low as possible.
- B. Projects and programs where the cost of saving water in some projects is higher than the cost of providing the water. This would allow us to save more water, and keep some of our public spaces green, even during drought.

Currently, it is not possible to save enough water to avoid building more water supplies – we must build the desalination plant anyway – but these measures help to reduce the chance of our supplies reaching low levels.

During the development of the LHWSP, the Lower Hunter community were very supportive of water conservation and recycled water activities, with the highest level of support given to these actions.

Some water efficiency, wastewater recycling and stormwater recycling projects are expensive – sometimes more expensive than collecting rainwater, treating it to drinking quality and distributing it across the region. When we're in drought it doesn't matter so much that the water is expensive because we really need it – expensive water is much better than no water at all! We can do more to encourage customers to use less water and reduce their leaks during a drought. Similarly, we can do more to reduce leaks from Hunter Water's system during drought. However, often it's too late to start recycled wastewater or stormwater projects during a drought. For example, the water in our storages can drop more quickly than we can build a recycled wastewater project.

Topic 3: Conserving water



There is also a question about who should pay. Should everyone pay all, or some of, the costs because we all benefit from having a more secure water supply? Should only the people who directly benefit from the water conservation activity pay? If it costs too much to take part in the water conservation activity, then we might not save as much water.

So, there are benefits to everyone if business and industry use recycled wastewater or, stormwater or an alternative to drinking-quality water. However, overall, it costs more. Business and industry currently get drinking quality water for the same price as households, so there is no reason for them to agree to pay more.

Business and industry are unlikely to agree to pay more for recycled wastewater so that the rest of the community can have water restrictions less often. We aren't going to force all customers to subsidise industry, but if the Community Panel recommends that customers should subsidise this water to improve our overall water security, then we will ask the regulator (IPART) for permission.

What is in scope for your discussions?

What you can influence on this topic	What you cannot influence on this topic
Water conservation actions and expenditure where the costs exceed the benefits, and the costs are paid for by all customers.	The exact projects and programs that Hunter Water does.
What's the fairest way to decide who pays? The end user, all customers, or a combination of both.	Water conservation actions and expenditure that is cost effective (benefits outweigh costs, assessed from a community perspective). Hunter Water's 2022-2027 Operating Licence requires us to implement these actions. In simple terms, if we can save \$1 of water for less than \$1, we'll do it.
Additional programs to encourage customers to reduce leakage on their side of the meter (on their property).	Water conservation actions and expenditure where the costs exceed the benefits, and the costs are paid for by directly benefitting customers.
Additional programs to encourage customers to use less water in their homes & businesses.	The accuracy of customer water meters. Laws require us to make sure our meters are accurate.
Additional education programs to help change people's water behaviours in and around the home and within their businesses.	Actions to reduce water theft.
Programs to encourage customers to replace drinking-quality water with other fit-for-purpose water sources (e.g. rainwater, recycled water) in their homes and businesses. This includes investment by Hunter Water in new projects where business or industry use an appropriate quality of water (like recycled wastewater or stormwater) instead of using drinking-quality water.	The location of specific projects.
Additional programs that further reduce our leakage from our existing water network	Who our customers are for specific projects to use alternative water for non-drinking purposes (such as recycled wastewater or stormwater).

Topic 3: Conserving water



Customer and community views

There is generally widespread support for all types of water conservation. That's where a lot of consensus ends. More than any other topic, the Community Panel members would be wise to read the relevant [Appendix C](#) in full.

Thought starters from our research partner

- Did survey participants know what they were getting when they responded?
- Did customers really understand what they would receive for the money they are being asked to invest on this topic?
- Were some of the options “what a good person would want”? Is there a chance we are giving the socially desirable answer instead of the real one? Do we feel safe to express views that might be “not nice”?
- Should the panel simply focus on the average Revenue Requirement, or should the opinions of some groups of customers get extra consideration?
- Are some of the options more likely to save water than others?
- Which option is the best in terms of the amount of water saved per extra dollar?
- Do Hunter Water people unconsciously prefer one option over the others because they like working on particular types of projects?
- Some of the options require households, businesses or councils to “play ball”. Will they?



Appendices



A. Research findings: hot spots



Customer and community views to 2022

In 2020, we sought to understand which services customers value most and how we perform against their expectations in those areas. Almost 1,200 residential customers shared their views through in-depth interviews, an online bulletin board and an online survey. Participants expressed concern that there were some customers who have low pressure all the time or experience recurring wastewater overflows. However, participants were not provided information about the costs involved in resolving these issues, or that those costs would have to be shared across all customers.



How important is this topic to customers?

In the focus groups participants were asked, "How much should the public participate in how many problem areas to fix and how quickly?"

Most participants wanted to be involved.

Sophisticated customers (experts) expected that the public should have even more of a say.

The participation level being offered is Collaborate, which means Hunter Water will implement your recommendations to the maximum extent possible.

Involve: "Pretty significant increase in bills so it is important to speak to people to keep them informed and also to involve them in the process."

(new Hunter Water customer)



A. Research findings: hot spots



How would customers like to see this topic addressed?

The engineering side of fixing the problem is for Hunter Water to work out, but there are at least two questions on this topic where the answer is based on principles:

1. “which type of problem is the worst?”
2. “should the worst affected customers be helped first, or should the cheapest problems to fix be the priority?” There’s also the question of how much money to put towards these hot spots.

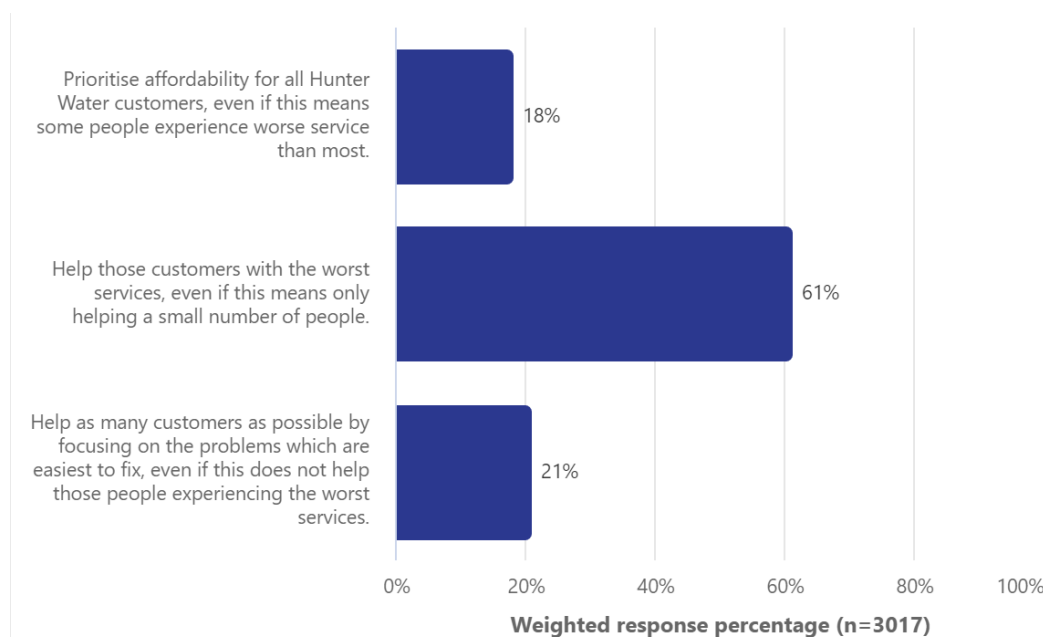
Fairness

Insync asked 3,017 customers which approach they thought was fairest.

Figure A.1 shows a clear preference for addressing the worst affected customers first, regardless of the cost.

Figure A.1 – Priorities survey result on hot spots (fairest)

If we were to invest \$5 million to address these issues, which approach do you think is fairest? (pick one)



Response percentages have been weighted to adjust for sample bias.

If we were to invest \$5 million to address these issues, which approach do you think is fairest? (pick one)

Date period: Invited 19 Apr 2023 – 21 May 2023

Response filter: Invited prior to 2023-05-22

Figure A.1 suggests that about one in five Hunter Water customers wouldn’t spend money on hot spots. The remaining two options were about principles: with the same amount of money should we fix the worst problems, or fix the cheapest problems? There were roughly three times as many people who said we should fix the worst problems, which was also a majority of all survey respondents.

The survey also included demographic questions. Although most segments of the community had roughly the same profile across the three response options, a person’s financial situation did have an influence.

A. Research findings: hot spots



Figure A.2 - Priorities survey result on hot spots (fairest) – breakdown by current financial situation

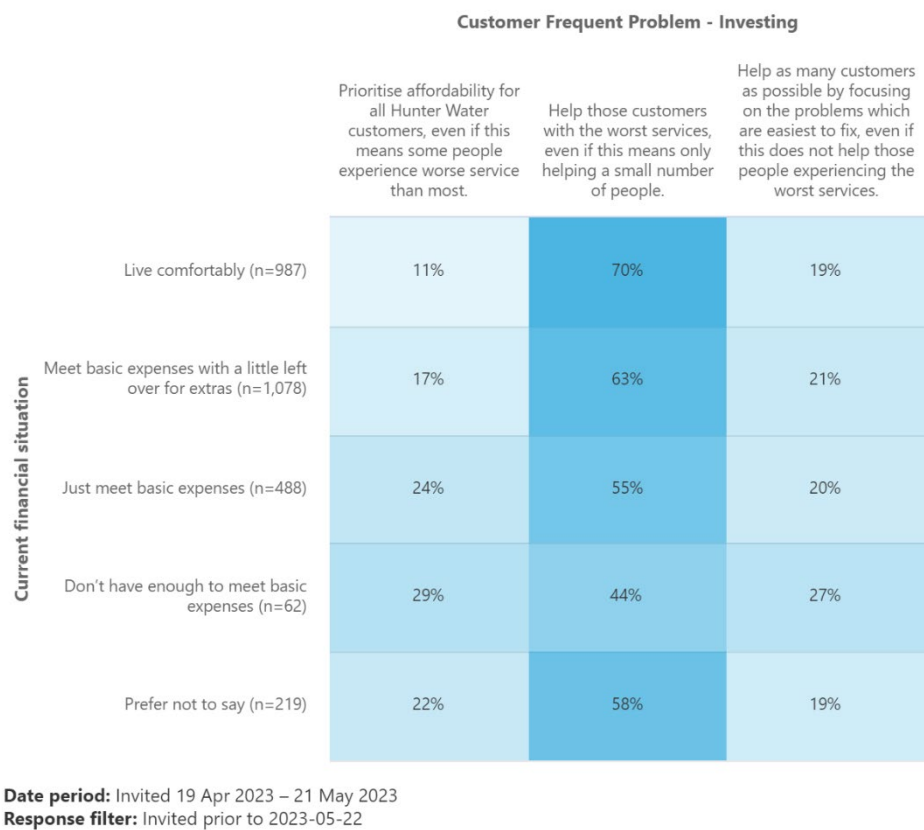


Figure A.2 shows that people having trouble making ends meet are far more likely to prioritise affordability, and less likely to suggest that Hunter Water help the worst affected customers.

If you're interested in the other demographic splits, keep in mind that you can review all the survey results yourself using the [login details](#) in the methodology section.

A. Research findings: hot spots

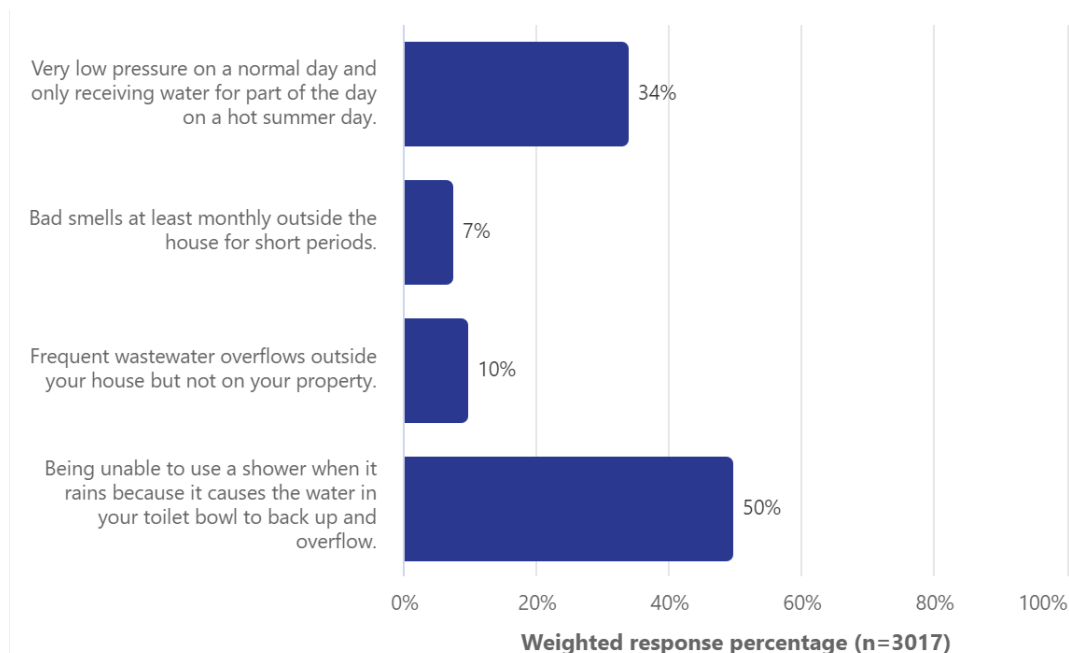


Inconvenience

Insync also asked customers which situation they would find most inconvenient. This question might be useful when it comes to advising Hunter Water which type of inconvenience it should prioritise. Note however, that the “bad smells” option is at a low level of inconvenience compared to what some Hunter Water customers experience. i.e. the “bad smells” option does not refer to the “customers with the worst services” in the question above.

Figure A.3 – Priorities survey result on hot spots (most inconvenient)

Which of the following would you find most inconvenient? (pick one)



Response percentages have been weighted to adjust for sample bias.

Which of the following would you find most inconvenient? (pick one)

Date period: Invited 19 Apr 2023 – 21 May 2023

Response filter: Invited prior to 2023-05-22

There aren't big differences of opinion driven by demographics. Even the financial situation doesn't appear to drive responses as it did in the first question.

A. Research findings: hot spots



How much are customers willing to pay to address Hot Spots?

Bill Simulator results

The Bill Simulator was carefully constructed to give people as much context as possible. It is described in the [methodology section](#).

Members of the Community Panel will have more context than our survey respondents. Therefore, these findings are included to guide and help you, but not to direct you.

The Bill Simulator had four options for the level of investment Hunter Water should “make to provide more people with the high quality, reliable services that most customers already enjoy”

1. Reduce bills by not fixing any areas with ongoing or frequent low water pressure, wastewater overflows or bad smells (cheapest option)
2. Keep bills low by only fixing ongoing or frequent problems for the worst affected customers (525 properties or 26% of the total affected properties)
3. Fix problems for the worst affected and highly affected customers (825 properties or 41% of the total affected properties)
4. Fix problems for the worst affected, highly affected and moderately affected customers (almost 2,000 properties or 100% of the total affected properties).

These options use Hunter Water’s system of characterising each customer as being either “Worst affected” “Highly affected” or “Moderately affected”. These descriptions align with Priority 1, 2 and 3 in chapter 9.

The results show why Hunter Water was so keen to get the Community Panel to help with this topic. Although one in eight (13%) of customers don’t think any money should be spent, there was no clear preference across the other three options. Insync’s view is that it is very difficult to imagine these issues when responding to a survey, particularly where they sit between inconvenient and intolerable. As such, Insync suggests that panel members listen to the experiences of real customers, ask questions, and form their own view.

A note on critical thinking

Daniel Kahnemann (and others) have shown that people tend to overestimate how a future, hypothetical event will change their happiness. This is called the “focusing illusion”. Applied to this question, it means that if we focus on a persistent odour, low pressure, or a sewer spill, we are likely to overestimate how (un)happy it will make us.

Insync designed the Bill Simulator to minimise the risk of various cognitive biases, but you can help minimise their effect simply by being aware of them.

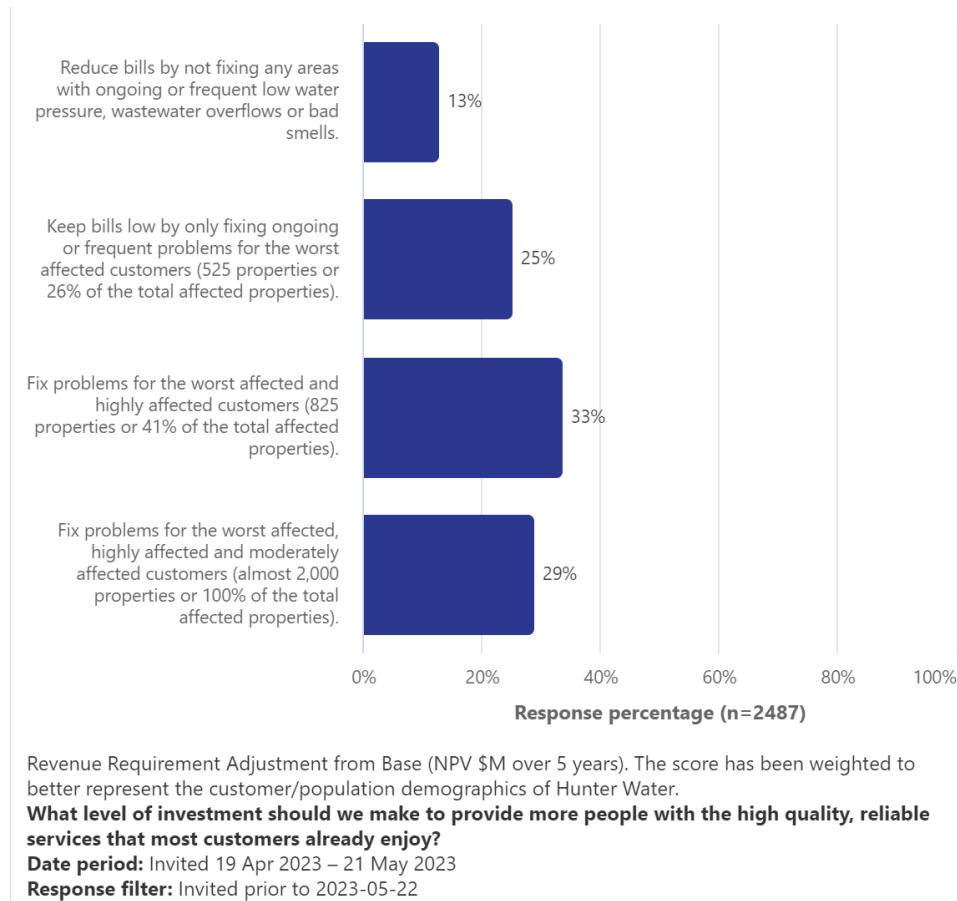
This topic made Insync consider whether perhaps they should only ask people who were in a hot spot about how much they’d pay to fix it. You might be wondering the same thing. The problem would be that a person in a hot spot could say they’d be prepared to pay \$100,000 to fix it, knowing that the costs would be spread over the whole community, and that they wouldn’t have to pay more than a few dollars.

A. Research findings: hot spots



Figure A.4 – Bill Simulator result on hot spots (Weighted Revenue Requirement: \$0.7M)

What level of investment should we make to provide more people with the high quality, reliable services that most customers already enjoy?



Like all survey data, this result could be subject to various biases, so please read the call out box on critical thinking.

Regardless of whether the responses were fully informed, when the cost impacts of the four choices were averaged out, the extra revenue that Hunter Water would need to collect from customers over five years was \$0.7 million. It is estimated that this amount of revenue would enable Hunter Water to fix issues for 200 to 500 customers, depending on whether the worst affected customers are helped first or the most customers helped for the least amount on money.

Again, analysis of the results by demographic shows that there aren't big differences of opinion across the community.

A. Research findings: hot spots



What does the focus group feedback tell us about the reasons behind the Bill Simulator answers?

When a person fills out a Bill Simulator there is always some uncertainty about how well they understood the questions being asked. Focus groups provide people with a chance to ask questions and feel comfortable in their knowledge when making decisions.

Insync has told us that when a particular group has a low (or high) willingness to pay in the Bill Simulator AND in a focus group, they are more confident of the result. When the Bill Simulator and focus groups contradict each other, more judgement will be required from the Community Panel.

In the focus groups, most participants (six out of seven groups) chose to fix problems for the worst, highly **and** moderately affected customers (almost 2,000 properties). This is slightly different to the results of the Bill Simulator, where most respondents chose to fix problems only for the worst and highly affected customers (approximately 825 properties). The large household group was the only cohort that chose to limit fixing problems to the worst and highly affected customers.

The main challenge with these results is that when deciding alone (while doing the survey) only three in ten chose the most expensive option. In comparison, almost all the focus groups chose the most expensive option. Could it be that **social desirability bias** made the focus groups unconsciously choose the “good” or “socially desirable” option? If so, should it be rejected? Are you, as a Community Panel member, also responding to an unconscious desire to pick the “right” option? If so, it might help to bear in mind that the cost of fixing hot spots needs to be borne by all customers, including a lot of people who are already feeling the pinch of higher costs of living. Perhaps people didn’t really understand the question in the online Bill Simulator, and the focus group advice is more dependable.

Table A.1 – Summary of focus group decisions on hot spots

Options for hot spots	Focus group decisions
Reduce bills by not fixing any areas with ongoing or frequent low water pressure, wastewater overflows or bad smells.	No focus group cohort chose this option.
Keep bills low by only fixing ongoing or frequent problems for the worst affected customers (525 properties or 26% of the total affected properties).	No focus group cohort chose this option.
Fix problems for the worst affected and highly affected customers (825 properties or 41% of the total affected properties).	Large households preferred this option.
Fix problems for the worst affected, highly affected and moderately affected customers (almost 2,000 properties or 100% of the total affected properties).	Pensioners, customers experiencing vulnerability, small households, medium households, Aboriginal and Torres Strait Islander customers, and medium business customers preferred this option.

A. Research findings: hot spots



Participants who preferred fixing problems for the worst, highly **and** moderately affected customers (priority 1, 2 and 3) provided the following reasons:

"Everyone is entitled to the same level of service and it should be the best service we can provide."

"Because they're paying the same amount as everyone else so they should get the same quality of service as everyone else."

"It's not fair that they pay the same amount and live with that."

"Everyone who lives here should get access to fresh clean water and it's not a high cost."

While those who preferred fixing problems only for the worst and highly affected customers (not the moderately affected) (priority 1 and 2) said:

"It's a small cost and helps a lot of people."

"It's a small price and I feel that some of these properties should be helped...and I'd like to reduce the chance of moving into one of those properties."

"Would fix the worst problem at a small increase."



B. Research findings: carbon reduction



Customer and community views to 2022

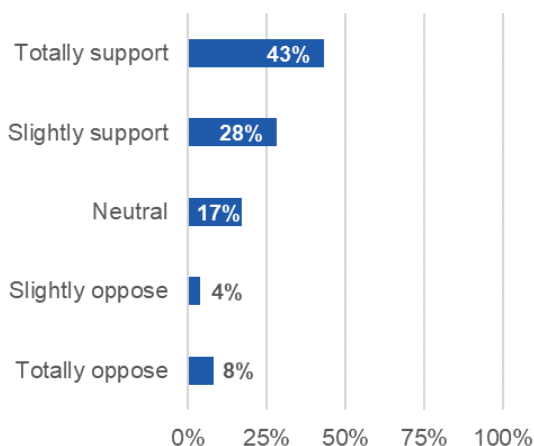
We have been listening to customer and community views on what our role is in reducing carbon emissions for several years. We have done some of the research ourselves and some was with other water utilities through the Water Services Association of Australia.

In 2020, we sought to understand which services customers value most and how we perform against their expectations in those areas. Almost 1,200 residential customers shared their views through in-depth interviews, an online bulletin board and an online survey.



Sustainability, including greenhouse gas emissions, was found to be of lower importance to overall satisfaction than water supply, wastewater management and customer service. Within the category of sustainability, recycling wastewater and reducing greenhouse gas emissions/ using renewable energy were amongst the highest priorities. However, some participants asked Hunter Water to be mindful of affordability (bill impacts) of sustainability projects and actions.

**% support for reducing carbon from
high energy water supply options**



As part of development of the Lower Hunter Water Security Plan, in 2020 Hunter Water surveyed 1,167 people and found strong support for including measures to reduce the carbon footprint for high energy water supply and demand options such as desalination. It was estimated that this would add \$2 to \$5 per year to a typical household water bill, ongoing. The survey assumed no other changes to customers' bills aside from those to improve water supply and demand. At the time they considered the rise in the context of the bills they were getting. The price rises as a result of inflation and the desalination plant mean that today, the Community Panel is faced with a very different starting point.

There were some concerns about using offsets to achieve the carbon reduction. Survey respondents much preferred the idea of establishing something (physically) that they know would be used to offset emissions.

"When you are making a physical offset that is better. When just buying renewable offset credits then that is not as good."

(Maitland participant)

"It's kind of like throwing the rubbish over the neighbour's fence so you don't have to deal with it."

(Maitland participant)

B. Research findings: carbon reduction



In 2022, the Water Services Association of Australia ran focus groups and a survey to help water utilities with their planning and future strategies with regard to managing their carbon emissions. Focus group participants agreed that water utilities should do something to reduce emissions but only if that doesn't impact water quality or bills (too much).

Most people thought that Government should be encouraging businesses to reduce emissions. Then, water utilities should be doing as much as they can before asking their customers to pay.

"We are already trying to actively reduce our water bills. The kids all have a bath together and we don't water the lawn."

(Regional participant)

"People are already stretched as it is, in Covid times. To do that now is not a good time."

(Regional participant)

Participants preferred utilities to act to reduce carbon emissions themselves first (using renewables and energy efficient measures) before investing in external projects done by third parties to offset the remaining carbon emissions.

There was scepticism about 'carbon offset projects' in general and whether they are adopted as a public relations exercise. For some, the idea of purchasing carbon credits through an accredited source made sense – and they preferred it to be Australian rather than International. On the other hand, some preferred direct investment as it would be clear where the money is going.

The survey was robustly designed and had enough participants to reliably draw conclusions about the broader community.

The survey results showed that our customers are willing to pay, on average, \$72 to \$83 per tonne of CO₂e to reduce emissions, **assuming no other changes to customers' bills**. The equates to a revenue requirement of \$6 to \$7 million.

However, 25% of surveyed customers are not willing to pay any more on their bills for carbon reduction. This is important because water and wastewater are essential services, delivered to customers that mostly have no choice in who they buy their services from.

How important is this topic to customers in 2022?

Forty-six percent of respondents in Hunter Water's August quarterly community survey said they expect Hunter Water to "play an active part in conversations about the impacts climate change" and "generate renewable energy". Thirty-nine percent of respondents also said they expect Hunter Water to "be carbon neutral". Furthermore, 28% of respondents in the August study said that carbon emissions mitigation was an interest, concern or priority for them.

Not only was this topic of interest to customers, in general, they expect to have a say. **Customers tend, on average to expect to be involved**, which means participating in coming up with solutions and deciding which one is best. **Hunter Water is offering an even higher level of participation, Collaborate.**

Collaborate: "If we are contributing financially we should have a say in where the money is going to be spent."

(new Hunter Water customer)

B. Research findings: carbon reduction



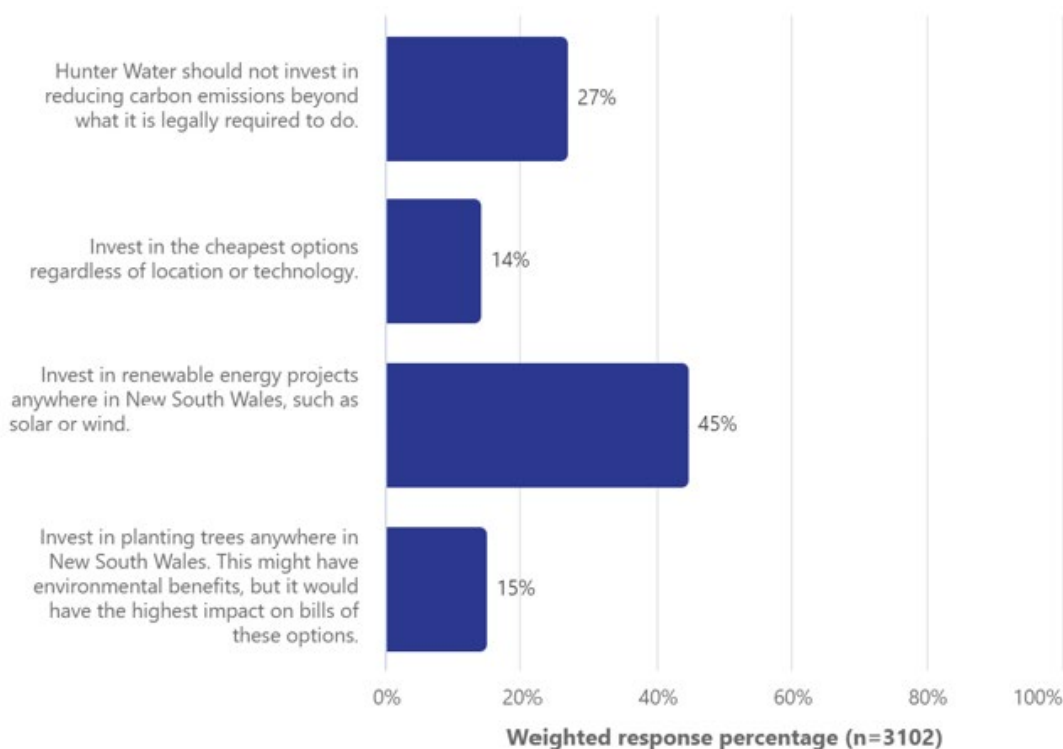
How would customers like to see this topic addressed?

Insync asked 3,102 Hunter Water community members about which options they prefer for reducing carbon emissions. Figure B.1 shows that about one quarter of people don't want to do anything, preferring to keep bills as affordable as possible.

Of the three quarters of people who wanted action, most chose the second most expensive option, which was to invest in renewable energy projects anywhere in NSW.

Figure B.1 – Priorities survey result on carbon reduction

Which techniques for reducing carbon emissions should we prioritise? (pick one)



Response percentages have been weighted to adjust for sample bias.

Which techniques for reducing carbon emissions should we prioritise? (pick one)

Date period: Invited 19 Apr 2023 – 21 May 2023

Response filter: Invited prior to 2023-05-22

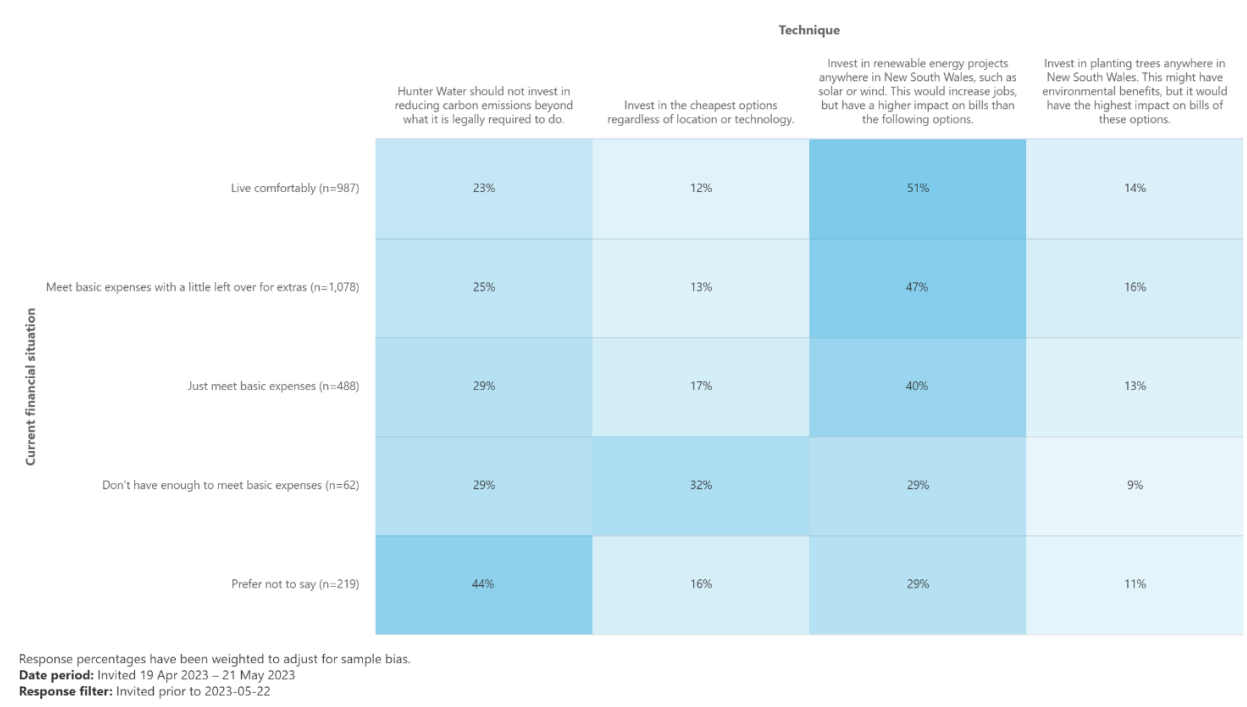
The overall pattern was true for all age groups up to seventy. Beyond that, older customers preferred the “do nothing” option.

A person's financial situation did have an influence on their preference (see Figure B.2). People having trouble making ends meet weren't much more likely to opt for the “do nothing” choice. Instead, they were more likely to select the “...cheapest options regardless of location or technology”. This would suggest that on average their ethics were the same but their ability to pay was different.

B. Research findings: carbon reduction



Figure B.2 – Priorities survey result on carbon reduction – breakdown by current financial situation



Gender is not normally a big factor in Bill Simulator studies about service levels related to water utilities. However, both gender and education are strong predictors of differences in willingness to pay for environmental goods. In the current question on carbon, gender explained a fairly large difference of opinion.

Figure B.3 – Priorities survey result on carbon reduction – breakdown by gender

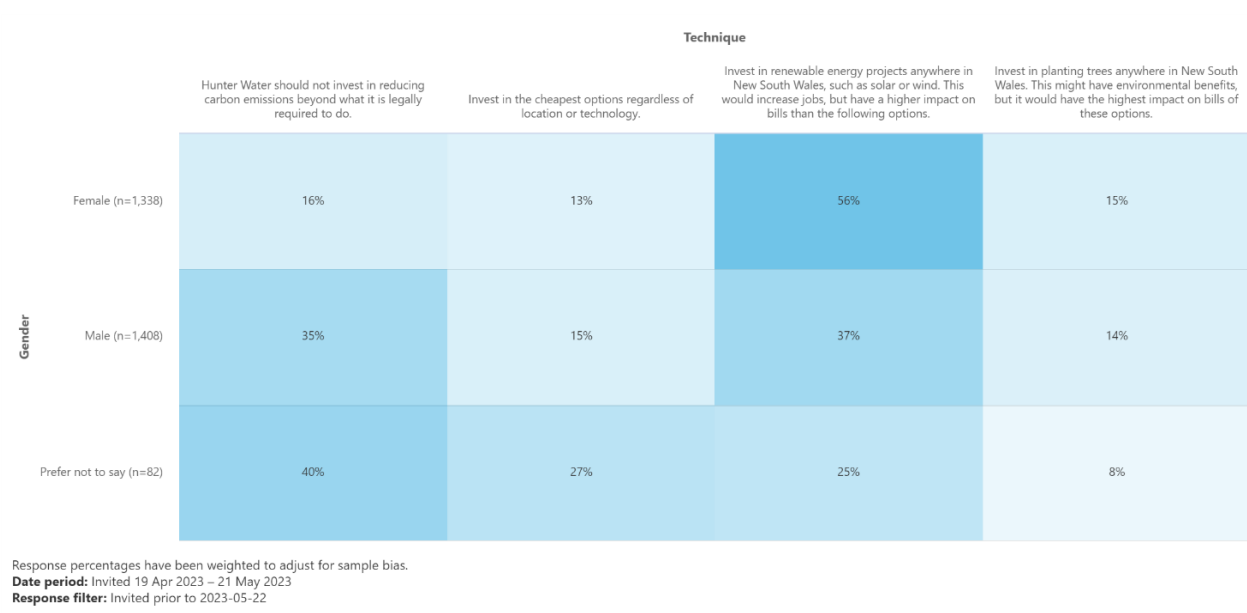


Figure B.3 above shows that twice as many men as women (35% versus 16%) chose the low-cost option.

B. Research findings: carbon reduction



A further insight that might help the Community Panel was evident when comparing the views of people who thought the exercise was “loaded and leading” with those who thought it was “fair and authentic” (below).

Figure B.4 – Priorities survey result on carbon reduction – breakdown by perceptions of survey bias

	Hunter Water should not invest in reducing carbon emissions beyond what it is legally required to do.	Invest in the cheapest options regardless of location or technology.	Invest in renewable energy projects anywhere in New South Wales, such as solar or wind. This would increase jobs, but have a higher impact on bills than the following options.	Invest in planting trees anywhere in New South Wales. This might have environmental benefits, but it would have the highest impact on bills of these options.
Loaded and leading – trying to get you to answer in a certain way (n=377)	43%	16%	30%	11%
Fair and authentic (n=1,631)	21%	12%	52%	15%
No opinion ((n=826)	28%	18%	41%	14%

Response percentages have been weighted to adjust for sample bias.

Date period: Invited 19 Apr 2023 – 21 May 2023

Response filter: Invited prior to 2023-05-22

B. Research findings: carbon reduction



How much are customers willing to pay?

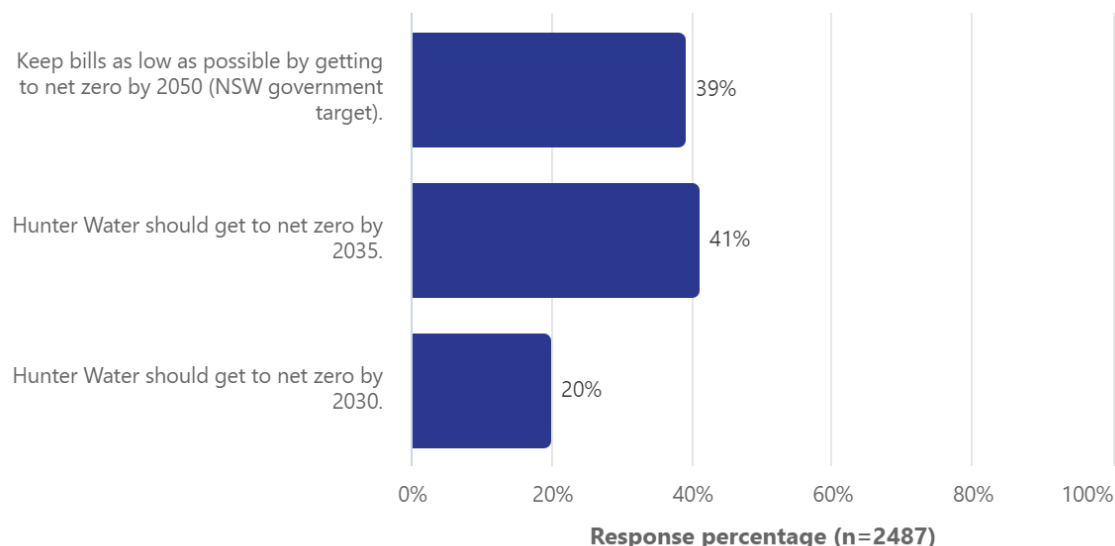
Bill Simulator results

From least to most bill impact, the options in the Bill Simulator were:

1. Keep bills as low as possible by getting to net zero by 2050 (NSW government target)
2. Hunter Water should get to net zero by 2035
3. Hunter Water should get to net zero by 2030

Figure B.5 – Bill Simulator result on carbon reduction (Weighted Revenue Requirement: \$3.9M)

***Hunter Water produces around 80,000 tonnes of carbon emissions per year.
How quickly should that be reduced, to help limit climate change?***



Revenue Requirement Adjustment from Base (NPV \$M over 5 years). The score has been weighted to better represent the customer/population demographics of Hunter Water.

Hunter Water produces around 80,000 tonnes of carbon emissions per year. How quickly should that be reduced, to help limit climate change?

Date period: Invited 19 Apr 2023 – 21 May 2023

Response filter: Invited prior to 2023-05-22

If we combine the costs of each option in proportion to their levels of support, we would have almost \$4 million added to the revenue requirement.

A person's financial situation was a good predictor of when they wanted Hunter Water to get to net zero and how much they were prepared to pay. People who live comfortably were more likely to want to get to net zero by 2030, and their willingness to pay added up to an increase of \$4.7 million to the revenue requirement, higher than the average. By contrast, the 384 respondents who "just meet basic expenses" would prefer that number to be \$3.0 million. The 51 people who don't have enough to meet basic expenses were even more likely to defer net zero to 2050 – and their aggregated willingness to pay would increase the revenue requirement by just \$1.8 million.

A critical question is whether to recommend that Hunter Water invest the average revenue requirement, or whether to prioritise the views of some groups over others.

B. Research findings: carbon reduction



Another good predictor of responses was the “loaded and leading” demographic. The “net zero by 2035” option was chosen by about 45% of the 1,456 people who thought the exercise was fair and authentic, about 36% of those who had no option, and about 30% of the 228 people who thought it was loaded and leading. There was a commensurate increase in the proportion who opted for the least cost option.

Focus group feedback

In the focus groups, most participants (five out of seven groups) chose to get to net zero by 2035. This matches the results of the Bill Simulator.

Table B.1 shows that pensioners, small households, medium households, Aboriginal and Torres Strait Islander customers, and medium business customers preferred to get to net zero by 2035. Whereas, customers experiencing vulnerability and large households preferred to keep bills as low as possible by getting to net zero by 2050.

Table B.1 – Summary of focus group decisions on carbon reduction

Options for carbon reduction	Focus group decisions
Keep bills as low as possible by getting to net zero by 2050 (NSW government target).	Customers experiencing vulnerability and large households preferred this option.
Hunter Water should get to net zero by 2035.	Pensioners, small households, medium households, Aboriginal and Torres Strait Islander customers, and medium business customers preferred this option.
Hunter Water should get to net zero by 2030.	No focus group cohort chose this option.

Participants who preferred getting to net zero by 2035 provided the following reasons:

- “It’s a priority for me to get to net zero as soon as possible. The middle is a balance. Everyone is feeling cost of living pressures.”
- “I don’t think 2030 is feasible but 2050 is too far away. The cost for 2035 isn’t too much.”
- “I think big corporations needs to pull their weight, but I’m happy to make my family pull their weight too. The economic climate at the moment is really bad and I don’t want to raise the price too much, especially for those who do it really hard.”
- “I want to help keep emissions down, but I don’t want such a significant price increase.”

While those who preferred getting to net zero by 2050 said:

- “My aim is to use less water as opposed to paying money for Hunter Water to plant trees. I can have more impact personally. I’m not confident Hunter Water would use my money efficiently.”
- “I’d like to keep bills low because of the extra \$40 from the desalination plant. The target is 2050 so we’ve got time to get going.”
- “Considering cost of living pressures, I want to avoid additional costs for my family.”
- “I imagine there is some research and studies behind the 2050 goal and I’m comfortable with that.”

C. Research findings: conserving water



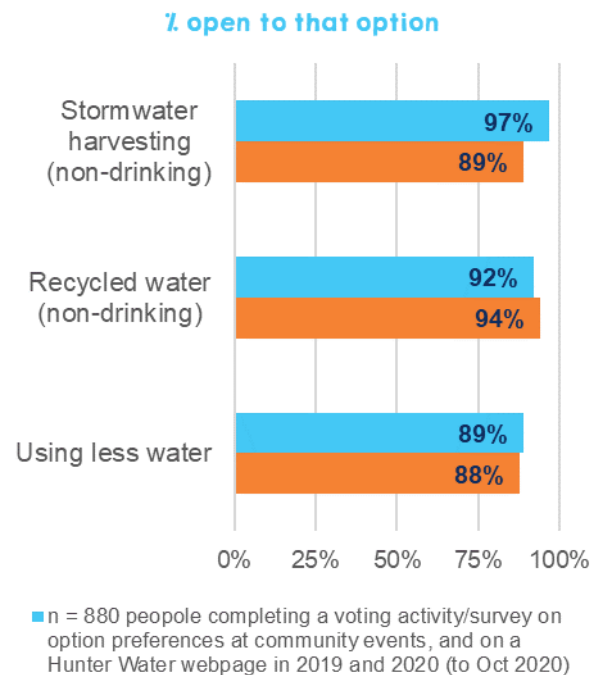
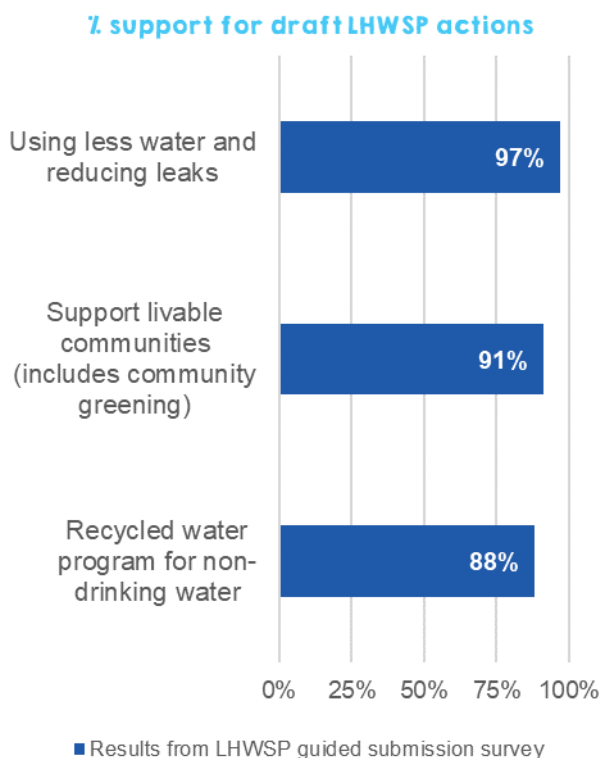
Customer and community views to 2022

The Lower Hunter Water Security Plan (LHWSP) charts a course to significantly improve water security in our region by both reducing drinking water consumption and increasing access to new water sources (see Chapter 5, page 26).

Between 2019 and 2021, an extensive engagement program to understand community views, values, and preferences informed the LHWSP. All options to conserve drinking-quality water had strong community support throughout the process.

Hunter Water provided a broad range of ways for the community to provide input across three phases of engagement.

During the development of the LHWSP, we asked our community their views and preferences across eight different supply and demand option types. The results were relatively consistent over time, with the community telling us they were quite open to considering all options. Options that reduce demand for drinking water, including water conservation, were strongly supported by our community.



Responses to a guided submission survey on the draft LHWSP showed support the plan's actions on saving water. The highest level of support out of all of the included actions was "using less water and reducing leaks". The top reasons that people gave for supporting that action were less wasted water (35%), efficiency (23%), common sense (18%), and cost savings (15%).

Through separate customer research in 2020, we looked at which services customers value most and how we perform against their expectations in those areas. Almost 1,200 residential customers shared their views through various engagement methods.

- 38% of survey respondents included reducing leakage in their top three most important water supply services – equal third.
- Amongst the respondents who said they were aware of Hunter Water's leakage performance, 65% of customers thought that Hunter Water's performance at reducing leakage was high or extremely high, and 11% thought it is poor or extremely poor. However, willingness to pay for additional leakage reduction was not tested.

C. Research findings: conserving water



Recycled wastewater or stormwater for business and industry

Customers are interested in recycled water, and want to have a say

The customer quotes (below) from focus groups reveal a variety of views about recycled water, and the amount of participation that people expect to have.

Involve: "I want to be Involved in who is going to pay for it but Consulted on where the water will be used."

Involve: "I should not be paying for something that I am not using. The end user needs to pay not others. Some people may not be happy to use recycled water."

Consult: "They know how much the water usage is and whether it is sustainable or not. Hunter Water are the best people to make the decisions but I would still like to provide input."

Consult: "Hunter Water know what they are looking at and all the different expertise. Hunter Water should decide where the recycled water is used and we need to be involved in the decision of who gets to

Involve: "Hunter Water should be the one who decides where it is being used. But as to cost...the ratio of how much the end user pays needs community involvement."

Collaborate: "It sounds like this would benefit very specific customers (mostly larger customers). So I would say Collaboration, as the cost will impact everyone and is more significant."

Key:

- Renters
- Vulnerable customers
- Young/future customers
- Recent customers
- Small/medium business customers
- ATSI customers
- Older customers

C. Research findings: conserving water



Most participants recognised that Hunter Water would have the expertise to know what types of recycled water should be implemented, hence a Consult level of participation would be appropriate to decided end uses for the water. **But when deciding who pays, customers would like to be Involved because they want input on “the ratio of how much the end user pays”.**

Interviews with expert stakeholders yielded mixed results.

“Customers should be shown the business case including a co-payment that Hunter Water decides on prior. For example, Hunter Water might realise that industry isn't prepared to pay full cost reflective pricing, so there's no point asking customers how much the subsidy should be. Hunter Water should do willingness to pay studies and work that out in advance.”

(Expert external stakeholder)

These views have driven Hunter Water's approach to encouraging the Community Panel to participate meaningfully on the topic of using recycled water for business and industry.



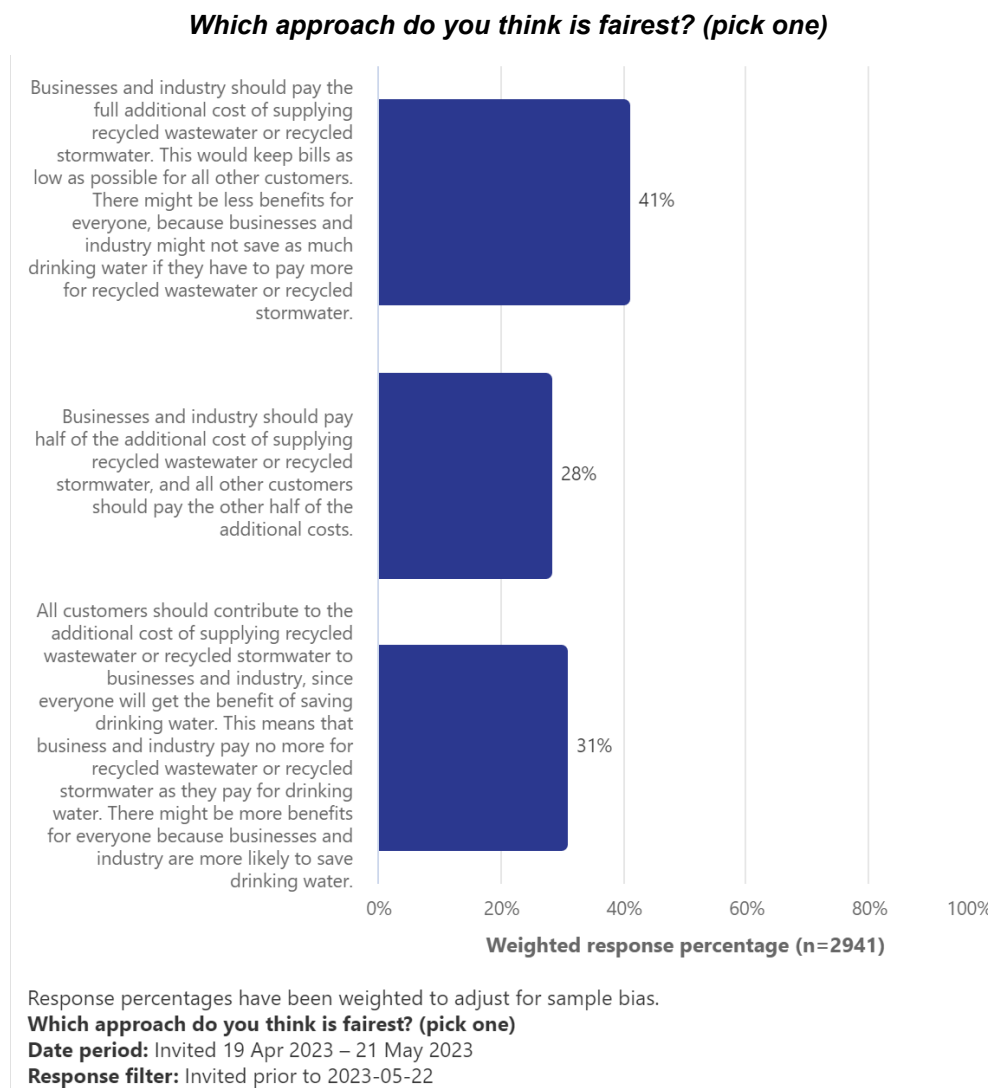
C. Research findings: conserving water



How would customers like to see this topic addressed?

As was described in the earlier chapter, sometimes recycled water costs more than rainwater. Business and industry may not want to pay more for recycled water, and all customers would benefit from lower demand on drinking water by having water restrictions less often. However, the idea that everyday customers should subsidise recycled water for business and industry may not be acceptable to the community. Insync put the question to 2,941 people in our community, and the results were very mixed.

Figure C.1 – Priorities survey result on recycled water for business and industry



If a person thought that the survey was “loaded and leading”, then they were far more likely to put the whole cost on business and industry.

Table C.1 shows some other demographics and their attitudes toward the three options. There were many other demographics in the survey which you can see using the [logins provided](#). However, we thought this report was already long enough so we didn’t show them all.

C. Research findings: conserving water



Table C.1 – Priorities survey result on recycled water for business and industry – breakdown by different demographics (%)

	Overall (n=2,941)	Close to zero interest in water (n=68)	I'm passionate about water (n=368)	Residential customer (n=2,858)	Business customer (n=74)
Businesses and industry should pay the full additional cost of supplying recycled wastewater or recycled stormwater. This would keep bills as low as possible for all other customers. There might be less benefits for everyone, because businesses and industry might not save as much drinking water if they have to pay more for recycled wastewater or recycled stormwater.	41%	60%	36%	42%	20%
Businesses and industry should pay half of the additional cost of supplying recycled wastewater or recycled stormwater, and all other customers should pay the other half of the additional costs.	28%	19%	24%	28%	21%
All customers should contribute to the additional cost of supplying recycled wastewater or recycled stormwater to businesses and industry, since everyone will get the benefit of saving drinking water. This means that business and industry pay no more for recycled wastewater or recycled stormwater as they pay for drinking water. There might be more benefits for everyone because businesses and industry are more likely to save drinking water.	31%	21%	40%	30%	59%



C. Research findings: conserving water



Table C.1 continued – Priorities survey result on recycled water for business and industry – breakdown by different demographics (%)

	Overall (n=2,941)	Female (n=1,338)	Male (n=1,408)	Live comfortably (n=987)	Just meet basic expenses (n=488)
Businesses and industry should pay the full additional cost of supplying recycled wastewater or recycled stormwater. This would keep bills as low as possible for all other customers. There might be less benefits for everyone, because businesses and industry might not save as much drinking water if they have to pay more for recycled wastewater or recycled stormwater.	41%	37%	43%	31%	56%
Businesses and industry should pay half of the additional cost of supplying recycled wastewater or recycled stormwater, and all other customers should pay the other half of the additional costs.	28%	32%	25%	31%	21%
All customers should contribute to the additional cost of supplying recycled wastewater or recycled stormwater to businesses and industry, since everyone will get the benefit of saving drinking water. This means that business and industry pay no more for recycled wastewater or recycled stormwater as they pay for drinking water. There might be more benefits for everyone because businesses and industry are more likely to save drinking water.	31%	31%	32%	38%	23%

How much are customers willing to pay?

To complement the priorities survey there was a question in the Bill Simulator focused on recycled water or stormwater for business and industry. It had three options for investment:

1. Hunter Water should do whatever keeps bills as low as possible
2. Increase large scale recycled water use to 300 million litres per year (5% increase)
3. Increase large scale recycled water use to 540 million litres per year (9% increase)

If a person chose either of the second two options, then a bill impact was shown that correlated to the community sharing the cost of the more expensive water along with the business that were using it.

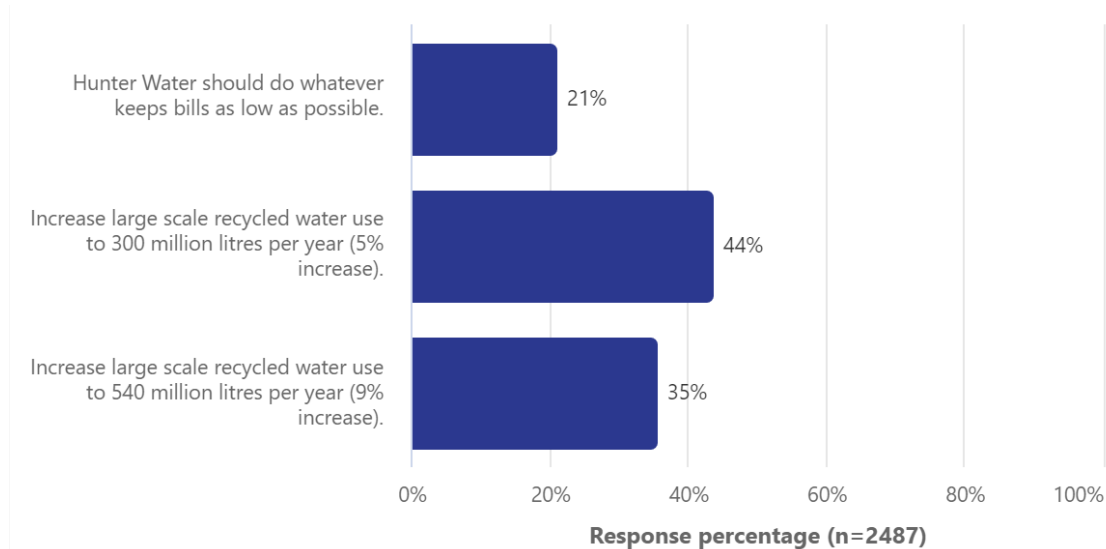
The results suggested that about 80% of 2,487 respondents were willing to pay extra. The extra revenue that would need to be borne by the customer base was \$2.0 million per year based on the average across all respondents.

C. Research findings: conserving water



Figure C.2 – Bill simulator result on recycled water for industry (Weighted Revenue Requirement: \$2.0M)

Recycled water or business and industry: Recycled wastewater schemes in the Lower Hunter provide around six billion litres of water per year that would otherwise need to be provided with drinking water. How much should we invest?



Revenue Requirement Adjustment from Base (NPV \$M over 5 years). The score has been weighted to better represent the customer/population demographics of Hunter Water.

Recycled wastewater schemes in the Lower Hunter provide around six billion litres of water per year that would otherwise need to be provided with drinking water. How much should we invest?

Date period: Invited 19 Apr 2023 – 21 May 2023

Response filter: Invited prior to 2023-05-22

Male and female views on this issue were very similar. Similarly, whether or not a person had a concession card made little difference. One demographic that did make a difference was a person's level of interest in water. The change in revenue requirement for the "close to zero interest in water" group (n=68) was just \$1.1 million compared to the "very interested" and "passionate" groups at \$2.3 million each.

Focus group feedback

In the focus groups, most participants (five out of seven groups) chose to increase the large-scale use of recycled water to 540 million litres per year. This was the most expensive choice, and only chosen by about one in three people in the Bill Simulator survey.

Table C.2 shows that customers experiencing vulnerability, small households, medium households, large households, and Aboriginal and Torres Strait Islander customers chose to increase large scale recycled water use to 540 million litres per year. On the other hand, pensioners and medium business customers preferred a smaller increase in the volume of recycled water used.

C. Research findings: conserving water



Table C.2 – Summary of focus group decisions on recycled water for business and industry

Options for recycled water for business and industry	Focus group decisions
Hunter Water should do whatever keeps bills as low as possible.	No focus group cohort chose this option.
Increase large scale recycled water use to 300 million litres per year (5% increase).	Pensioners and medium business customers preferred this option.
Increase large scale recycled water use to 540 million litres per year (9% increase).	Customers experiencing vulnerability, small households, medium households, large households, and Aboriginal and Torres Strait Islander customers preferred this option.

Participants who preferred an increase to 540 million litres per year provided the following reasons:

- “Anything that saves water and provides a better outcome in terms of sustainability is a good outcome.”
- “It’s good to encourage businesses to be more water-wise and we’ll have more water in droughts.”
- “Will help ensure we have a sustainable drinking water source.”
- “Normalising recycled water is a good thing.”

While those who preferred an increase to 300 million litres per year said:

- “I like the thought of recycled water. It’s important to use what we have. Use this as a starting point.”
- “Start in the middle and have the option to increase.”
- “I like the idea and it’s good value for money.”
- “It’s affordable but we shouldn’t have to subsidise everyone.”

C. Research findings: conserving water



Recycled wastewater or stormwater for community greening

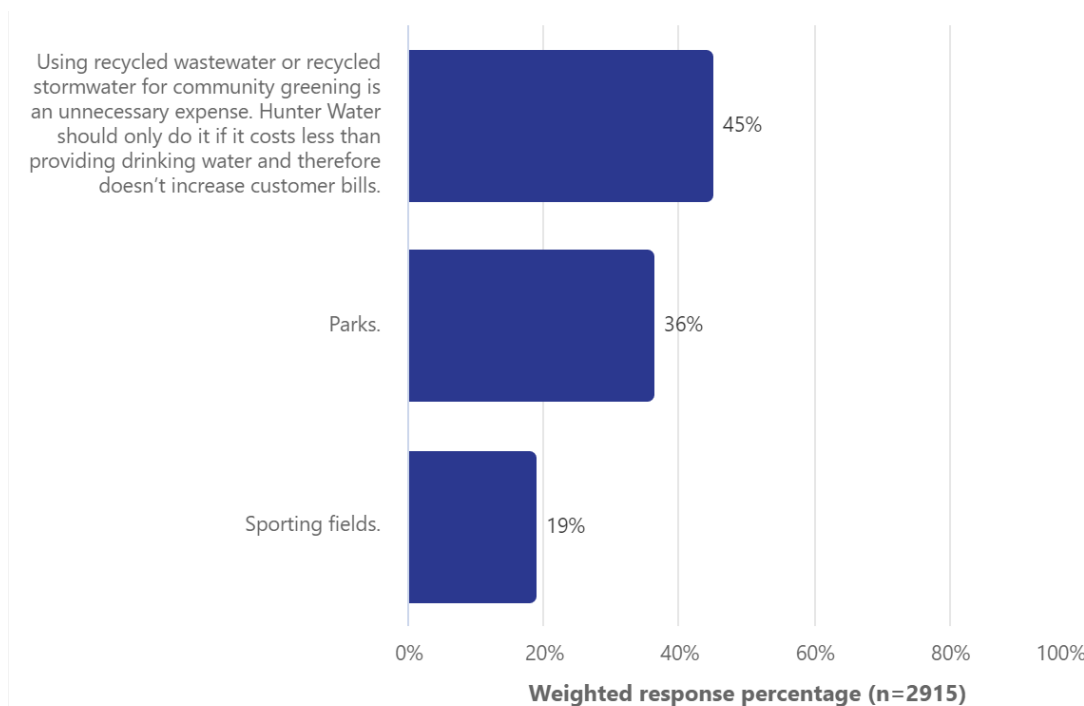
About half of customers (49%) said that they expect Hunter Water to “work with local councils to provide greener and cooler public spaces for recreation”.

Priorities survey results

Insync asked customers about which options they prefer for using recycled water for community greening. Three options were presented: prioritise affordability, parks, or sporting fields.

Figure C.3 – Priorities survey result on recycled water for community greening

Which of the following types of areas would you like to see us prioritise? (pick one)



Response percentages have been weighted to adjust for sample bias.

Which of the following types of areas would you like to see us prioritise? (pick one)

Date period: Invited 19 Apr 2023 – 21 May 2023

Response filter: Invited prior to 2023-05-22

Forty-five percent of respondents would have Hunter Water put affordability first, and prefer no additional use of recycled water for community greening. Fifty-five percent wanted action, about two thirds of whom would prioritise parks and one third sports fields. This result was heavily impacted by financial situation, with 70% of those who couldn't make ends meet opting for the affordability option, compared to just 34% of people who live comfortably.

C. Research findings: conserving water



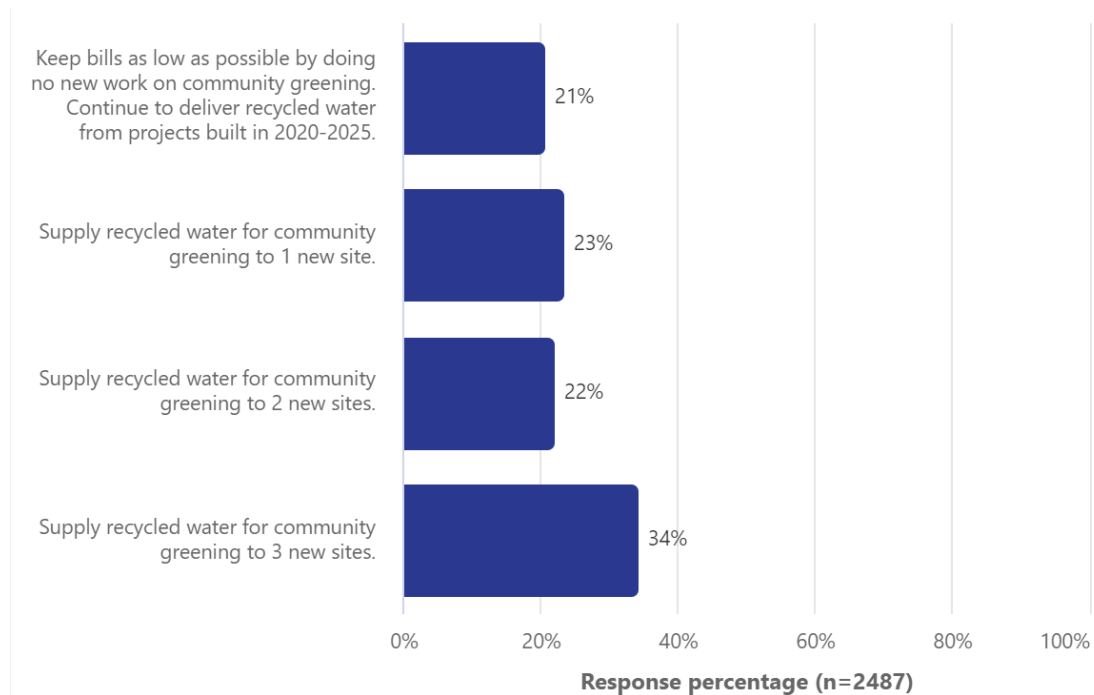
How much are customers willing to pay?

The Bill Simulator question complemented the priorities survey. Where the priorities survey split people between parks and sports fields, the Bill Simulator attempted to gauge willingness to pay. It had four options for the level of investment that respondents thought should be allocated community greening, in increasing order of bill impact:

1. Keep bills as low as possible by doing no new work on community greening. Continue to deliver recycled water from projects built in 2020-2025
2. Supply recycled water for community greening to 1 new site
3. Supply recycled water for community greening to 2 new sites
4. Supply recycled water for community greening to 3 new sites

Figure C.4 – Bill Simulator result on recycled water for community greening (Weighted Revenue Requirement: \$2.3M)

What level of investment should be made to increase recycled water use for community greening?



Revenue Requirement Adjustment from Base (NPV \$M over 5 years). The score has been weighted to better represent the customer/population demographics of Hunter Water.

What level of investment should be made to increase recycled water use for community greening?

Date period: Invited 19 Apr 2023 – 21 May 2023

Response filter: Invited prior to 2023-05-22

The results show a wide split across the community, from about one in five that preferred to do nothing (21%), to about one in three who wanted the maximum (34%). These people's willingness to pay might have been higher than the three sites option, but they were unable to state that preference. Conversely, it's not really fair to derive a revenue requirement and call it an average – since people who wanted to pay nothing didn't want to pay the average price at all.

In short, this is a topic where the Community Panel is going to have to make recommendations based on its deeper understanding of the pros and cons of the topic.

C. Research findings: conserving water



Although the average revenue requirement change associated with the Bill Simulator results was \$2.3 million, various groups had a willingness to pay which was very different. Those who can't meet basic expenses only displayed a revenue requirement increase of \$1.1 million, whereas those who live comfortably proposed an increase of \$2.8 million. Customers who judge Hunter Water on its environmental performance suggested an increase of \$3.2 million. Don't forget that if you want more information you can use the [Insync results portal](#) and interrogate the data yourself. Insync staff are on hand to help with any survey related questions you have, and fair warning, some of them are quite into the nerdy stuff.

Focus group feedback

There was little consensus across the focus groups on the topic of using recycled water for community greening. Most participants (three out of seven groups) chose to keep bills as low as possible by doing no new work on community greening. This is different to the results of the Bill Simulator, where most survey respondents preferred to supply recycled water to three new sites.

Table C.3 shows that large households, Aboriginal and Torres Strait Islander customers, and medium business customers chose to keep bills as low as possible. On the other hand, customers experiencing vulnerability and small households preferred to supply recycled water to one new site, while pensioners and medium households chose two new sites.

Table C.3 – Summary of focus group decisions on recycled water for community greening

Options for recycled water for community greening	Focus group decisions
Keep bills as low as possible by doing no new work on community greening. Continue to deliver recycled water from projects built in 2020-2025.	Large households, Aboriginal and Torres Strait Islander customers, and medium business customers preferred this option.
Supply recycled water for community greening to one new site.	Customers experiencing vulnerability and small households preferred this option.
Supply recycled water for community greening to two new sites.	Pensioners and medium households preferred this option.
Supply recycled water for community greening to three new sites.	No focus group cohort chose this option.

Participants who preferred to keep bills as low as possible provided the following reasons:

- "I don't think it's worth it for the price."
- "I don't want to put fees up for disadvantaged people for three sites."
- "Rely on the desalination plant instead."
- "Can't see the benefit for only one site."

C. Research findings: conserving water



While those who preferred to supply recycled water to one new site said:

- “My first thought was that we should do more. But I was surprised by the cost for only doing one or two more sites...Using recycled water is a good thing, but this is a bit low bang for buck.”
- “I think it’s worthwhile...I think it’s crazy to use drinking water to water [the] grass.”
- “I was originally thinking of more, but the higher cost is only for three new sites. And the current plan includes two sites anyway.”

Whereas participants who chose to supply recycled water to two new sites said:

- “Green fields are beneficial. And the fact that it is done by recycled water and leaves more water in the drinking system for households is great.”
- “Doesn’t reach many sites but it needs to happen.”
- “We’ve all been through a drought. We need places to go to when there is a drought.”
- “Cautious of costs but my family use lots of green spaces.”



2025-2030 pricing proposal customer and community engagement process

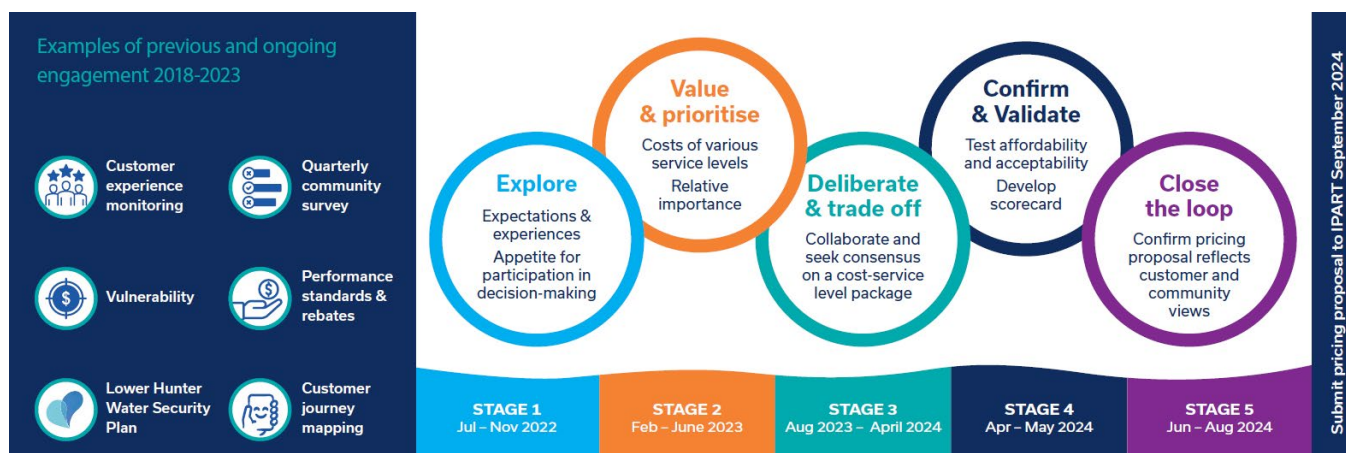
Oh no! This sounds terribly boring. We're going to try to make it easy to understand, because it is also terribly important. It should answer the question "how did you come up with the rest of the insights in the report?"

It is useful to think of the entire process as a funnel. At the early stages the engagement was really wide so that everyone could have a say. As time has gone on, the focus has narrowed and the techniques have become deeper. The deepest technique is the deliberation. There are times when you might have given one answer in a survey, but after learning more you might give the opposite answer – and for this reason you might choose to ignore a survey finding in this report. That's your power and your choice.

Over the last 18 months, we have been engaging with customers to understand what they want. The customer engagement program for the pricing proposal has been broken into five stages, described in the graphic below.

After the infographic there's a description of the techniques used in each stage.

Figure D.1 – 2025-2030 pricing proposal customer engagement program



Exploration techniques

The main components of Stage One (Explore) have been summarised in Table D.1.

Table D.1 – Summary of Stage One (Explore) engagement activities

Engagement activity	Description
Listening posts (September 2022)	<p>Held online workshops with 96 customers from across the Hunter Water service area, including:</p> <ol style="list-style-type: none"> 1. Newcastle 2. Lake Macquarie 3. Port Stephens 4. Maitland 5. Cessnock 6. Dungog <p>Objective: To understand the interests, concerns and priorities of Hunter Water customers. Additionally, to understand their values and what experiences embody those values.</p>
External interviews (October 2022)	<p>Conducted interviews with nine representatives of the Hunter Water community. These people were advocates and peak body representatives for people having trouble making ends meet, business, land developers and others.</p> <p>Objective: To give sophisticated stakeholders a material opportunity to influence the engagement agenda at an early stage. In addition, to understand their perspectives on the style and extent of the engagement required.</p>
Exploration focus groups (October to November 2022)	<p>Held focus groups with 55 customers, including:</p> <ol style="list-style-type: none"> 1. Renters 2. Customers experiencing vulnerability 3. Recent customers of Hunter Water 4. Younger people (future customers) 5. Older customers 6. Aboriginal and Torres Strait Islander customers 7. Small and medium business customers <p>Objective: To understand how different types of customers view their role in making decisions that will have an impact on bills.</p>
Quarterly surveys (August and November 2022)	<p>Heard from 507 customers in August 2022 survey and 219 customers in the November 2022 survey.</p> <p>You can read more about the survey methodology here.</p> <p>Objective: To ensure that all Hunter Water customers had the opportunity to have a say in this early stage of the engagement.</p>
Non-residential interviews (January to May 2023)	<p>Conducted interviews with 42 members of the Hunter Water business community.</p> <p>Objective: To understand the interests, concerns and priorities of Hunter Water's non-residential customers.</p>

Valuation techniques

For many of the decisions that need to be made by the panel there are two considerations: how much to spend on delivering an experience, and which ways to deliver an experience. Conserving water is a good example. There are four ways presented to conserve our drinking water, and you can decide how much should be invested.

To ask a person both questions at once “how much?” and “how?” was judged to be too complex for a survey. More people would have rushed through, more people would have dropped out, and more people would have been excluded because the questions were too hard to understand.

Instead, Hunter Water used a **Priorities** survey to ask the “how?” question and a **Bill Simulator** to ask the “how much?” question.

These two data sources are brought together in the Engagement Report so that you, the Community Panel, can come to a shared view.

The main components of Stage Two (Value and Prioritise) have been summarised in Table D.2.

Table D.2 – Summary of Stage Two (Value and Prioritise) engagement activities

Engagement activity	Description
Priorities survey (April to May 2023)	<p>Heard from 3,102 customers in an online survey. You can read more about the survey methodology here.</p> <p>Objective: To establish the preferred ways to deliver the experiences that customers value.</p>
Bill Simulator (April to May 2023)	<p>Heard from 2,487 customers in an online survey. You can read more about the Bill Simulator methodology here.</p> <p>Objective: To understand what customers are willing to pay (or not pay) for services they think Hunter Water should keep, reduce or enhance.</p>
Valuation focus groups (April 2023)	<p>Held focus groups with 47 customers, including:</p> <ol style="list-style-type: none"> 1. Pensioners 2. Customers experiencing vulnerability 3. Small households 4. Medium households 5. Large households 6. Aboriginal and Torres Strait Islander customers 7. Medium business customers <p>Objective: To understand the reasons why customers are willing to pay (or not pay) for services they think Hunter Water should keep, reduce or enhance.</p>

Methodologies

This section describes how each technique was run.

Quarterly survey methodology

Hunter Water also runs a survey each quarter. There was fieldwork in August and November 2022 which has been used in this report.

People get paid a small amount of money for responding to this survey. They are targeted using their residential postcode.

There is also an open link with no payment that gets promoted by Hunter Water on social media, newspaper, and via an email to a selection of customers.

Overall, 507 completed responses were received to the August survey, and 219 completed responses were received to the November survey.

The August survey asked customers about their interests, concerns and priorities, as well as what they expect of Hunter Water.

I expect Hunter Water to:

- ☐ Generate renewable energy
- ☐ Be carbon neutral
- ☐ Provide recycled water for public parks and community sporting grounds
- ☐ Provide public drinking fountains
- ☐ Educate the community about water efficiency, what to flush and alternative sources of water
- ☐ Help customers who struggle to pay their water bills
- ☐ Provide additional support to communities impacted by extreme events
- ☐ Make additional allowances for customers with special needs during a water outage
- ☐ Support local community groups
- ☐ Improve local waterways/waterway health
- ☐ Provide rebates for water efficient appliances and tapware
- ☐ Work with local councils to provide greener and cooler public spaces for recreation
- ☐ Play an active part in conversations about the impacts of climate change
- ☐ Invest in research/innovation which might save water/money in the long term
- ☐ Other
- ☐ None of the above

The November survey focused on affordability, and asked customers whether anything was more important to them than keeping bills as low as possible. These results will be available soon.

Affordability can be a big concern for many Hunter Water customers. Please indicate if any of the following are more important to you than keeping bills as low as possible?

- ☐ Reducing carbon emissions as quickly as possible
- ☐ Offsetting carbon emissions with local projects that create local environmental benefits and jobs, but at higher than the minimum costs
- ☐ Addressing small pockets of very poor service such as low pressure, odours, or sewer spills
- ☐ Improving the look and surroundings of some of the concrete stormwater drains in Newcastle, Cessnock and Lake Macquarie, making them more pleasant spaces to be around
- ☐ Focusing on the health of Hunter Water's catchments to improve water quality and the environment, making them nicer to visit
- ☐ Providing subsidised recycled water to parks and gardens
- ☐ Providing subsidised recycled water to industry
- ☐ Building new digital capabilities to make it easier to deal with Hunter Water
- ☐ Rolling out digital meters to enable real time usage monitoring and leak detection

Priorities survey methodology

This survey had questions that were easier to answer than in a lot of other techniques. Hunter Water wanted people with all reading abilities to be able to participate in the engagement.

For the priorities survey, invitations were sent by Hunter Water with a link to a secure site hosted by Insync. The priorities survey was also promoted on Hunter Water's website and social media.

The priorities survey was cross promoted at the end of the Bill Simulator survey, noting the incentive of an additional competition entry upon completion of an extra survey.

The survey was open from 19 April to 15 May 2023. In total, 48,000 email invites were sent to Hunter Water customers and 3,102 completed responses were received. (6.4% response rate = better than average)

Survey access was anonymous, except if respondents wanted to enter a competition (to win one of five \$200 gift cards) at the end of the survey, in which case they had to provide their contact details; but their identity wasn't ever linked to their answers.

The survey platform automatically changed to a more-friendly layout on mobiles and smaller screens. [View the survey in full here.](#)

Most respondents completed the survey in under 11 minutes. The priorities survey asked customers to select which options they agreed with the most, or thought was the fairest, or thought Hunter Water should prioritise. They were shown a set of options within a specific topic and asked to identify which one they felt was the best option.

Question 1 of 7

Hunter Water produces around 80,000 tonnes of carbon emissions per year. Reducing emissions is necessary to limit climate change.

Which techniques for reducing carbon emissions should we prioritise? (pick one)

- ☐ Hunter Water should not invest in reducing carbon emissions beyond what it is legally required to do.
- ☐ Invest in the cheapest options regardless of location or technology.
- ☐ Invest in renewable energy projects anywhere in New South Wales, such as solar or wind. This would increase jobs, but have a higher impact on bills than the following options.
- ☐ Invest in planting trees anywhere in New South Wales. This might have environmental benefits, but it would have the highest impact on bills of these options.

Bill Simulator methodology

There are lots of different ways to measure willingness to pay, and none of them are perfect. Many are complex, forcing people to keep many things in mind at once. Most are overly hypothetical – respondents are more willing to spend the pretend money in a survey than they are willing to spend it in real life. There's also something called loss aversion bias, where people expect more compensation for giving something up than they would have been willing to pay to gain that same thing. Another problem is known as social desirability bias, where one option is more socially acceptable than the others, so people feel unconsciously compelled to choose it.

The option Hunter Water chose to measure willingness to pay was a Bill Simulator. A similar technique has been used by Victorian water corporations South East Water, Yarra Valley Water, Coliban Water, East Gippsland Water, Greater Western Water, and Goulburn Valley Water. Before Insync designed the Hunter Water Bill Simulator, its researchers looked through all past criticisms and met with the most critical organisation, Consumer Action Law Centre "CALC". CALC gives legal and debt advice to people who need it, and is highly respected for its views on essential services pricing. Insync discussed their concerns and how the simulator was going to be different to address those concerns. CALC did not criticize the simulators used by Insync in the above examples.

One thing CALC was really keen on was for water corporations to make sure they created empathy for people having trouble paying their bills. The pandemic has shown that almost everybody is just a few bits of bad luck away from having trouble making ends meet, and rising interest rates are putting new homeowners at special risk. Hunter Water and Insync have worked hard to do that in the surveys and in this report.

The survey was open from 19 April to 15 May 2023. In total, 50,000 email invites were sent to Hunter Water customers and 2,487 completed responses were received.

Survey access was anonymous, except if respondents wanted to enter a competition (to win one of five \$200 gift cards) at the end of the survey, in which case they had to provide their contact details, which were not related to their simulator responses.

The survey platform was not recommended for smartphones and tablet devices given the complex layout. [View the full survey here.](#)

The Bill Simulator tells us about a person's preferences, but not why they made their selections. In addition, it is hard to be sure that respondents genuinely understood the choices they were making.

To manage these uncertainties, in addition to the **online** distribution of the Bill Simulator, we conducted **focus groups** on the bill simulator with pensioners, customers experiencing vulnerability, small households, medium households, large households, medium business customers, and Aboriginal and Torres Strait Islander customers.

A reasonable question that you might be asking is “did respondents take these surveys seriously, or did they just race through because they thought the entire exercise was a sham?”. That’s a very fair question. To give us some insight, at the end of the Bill Simulator, Insync asked customers to respond to the question, “How did you find this exercise?”. The options were “Fair and authentic”, “No opinion” and “Loaded and leading”.

People who said “loaded and leading” were asked, “What would need to change for you to feel that the exercise was fair and authentic?”. Some of the comments suggested that people might have changed their response if they had a chance to ask questions. That’s fair, but impossible with 2,487 people. To cover that issue, in the focus groups we asked participants to agree on a single option for each topic, we gave them a chance to ask questions, and listened as they disagreed with and learned from one another.

You’ll see in the report that sometimes the focus groups came to a different willingness to pay compared to similar people in the online Bill Simulator. That means you’ll have to weigh up which figure to prioritise. Perhaps the focus group response is reliable because they could ask questions. On the other hand, the Bill Simulator could be more reliable as a result of having thousands of responses.

The Bill Simulator was framed in the context of other bill increases related to the Belmont desalination plant which was a key element of the Lower Hunter Water Security Plan.

Before respondents could progress to the Bill Simulator questions, they had to read an explanation of the starting point for bills¹ in the survey, and confirm they understood what the survey was about:

What this survey is about

Hunter Water is faced with some important choices that will impact customer bills. We want to collaborate with you in making these decisions so we can get the balance right between keeping bills affordable and providing the services you want from us.

The focus of this survey is on services which our customers have already expressed an interest in. In the survey you will have the opportunity to show us your preferences, and we will show the impact of your preferences on average bills to help inform your choices. As a reminder, **the results of this survey won’t be taken as authorisation to raise prices.**

This survey includes the bill increases related to building the Belmont desalination plant which was a key element of the Lower Hunter Water Security Plan (LHWSP). *The community was extensively involved in developing the LHWSP over three years, and the plan was approved by the NSW Government in April 2022. To learn more about the plan, [click here](#)*

It is important that you know about the price effects of building the desalination plant. While we will not know the exact figures until the desalination plant is built, the best estimate is an increase in average annual bills in the order of \$120 from 2025 onwards, or \$40 per four-monthly bill. This amount is based on a medium household of three or four people who use 180KL (thousand litres) of water per year. **This survey is testing further potential service options after 2025 that, if implemented, would also impact bills.**

Any changes to the inflation rate will also be added to the bills shown in this survey.

Our prices are regulated by the Independent Pricing and Regulatory Tribunal (IPART), which goes through any proposed changes to our prices very carefully to make sure we don’t charge more than we need to.

¹ At the time of running the Bill Simulator, we used the Lower Hunter Water Security Plan (LHWSP) costs that had previously been communicated to the public to explain the starting point for bills. Hunter Water is working hard to determine what all of the costs that comprise the starting point for bills will be, including any updated costs associated with the LHWSP.

D. Methodology



The starting point for bills in this survey

Hunter Water sends bills to customers every four months.

The starting point for bills in this survey include the cost of building the Belmont desalination plant - a key element of the Lower Hunter Water Security Plan (LHWSP).

\$455 Medium household bill (issued four monthly)

\$415 Water and wastewater services

\$40 LHWSP

Please check this box if you understand and would like to continue with the Hunter Water bill simulator.

☐ Yes, I understand - let's get started

◀ BackGo ▶

Most people finished the Bill Simulator survey in under ten minutes, from which approximately six minutes was spent interacting with the Bill Simulator page of the tool, suggesting that, on average, respondents took the exercise seriously.

Given the custom design of the Bill Simulator, respondents were taken through a brief explanatory guide upon accessing the survey. A sample of the guided tour is shown below:

Explanatory guide – step 1 of 5

Let Hunter Water know what is important to you by adjusting the slider in each of the questions below. The blue pane will show the combined impact that your choices could have on the future bills for different types of customers.

Next

Explanatory guide – step 2 of 5

This is your chance to have a say on the right balance between price and service. There are only six questions but they will take a few minutes to think about. You can move back and forth between the questions to make adjustments until you're happy.

BackNext

The Bill Simulator had six questions. The six questions were presented on sliding scales where respondents selected the appropriate balance between two anchors. Three of the sliding scale questions had four “snap points” to select from, two questions had three “snap points”, and one question had five “snap points”.

Each snap point was accompanied with a small descriptor that provided a brief explanation of the selected service preference. Default text (in red in the next screenshot) notified the user when they were yet to touch the slider.

A slider value was only captured once the user engaged the slider by clicking on the slider and dragging, and users were not able to progress beyond the Bill Simulator page until all questions had been answered.

D. Methodology



Question 1 of 6



Hunter Water produces around 80,000 tonnes of carbon emissions per year. How quickly should that be reduced, to help limit climate change?

Keep bills as low
as possible

Please move the slider to select your desired preference.

Increase
investment in
getting to net zero








The average bill impact for different types of customers was presented to respondents while they considered and responded to the questions in the simulator.

The impact on bills was calculated and displayed for five customer profiles, defined on the Bill Simulator as:

- **Pensioner household** – Household of one or two people who have relatively low water use (100KL per year) and receive a rebate (e.g. Pensioner Concession Card or Veterans' Affairs Gold Card).
- **Small household** – Household of one or two people who have relatively low water use (110KL per year).
- **Medium household** – Household of three or four people who have average water use (180KL per year).
- **Large household** – Household of five or more people with a big garden and/or pool and have high water use (290KL per year).
- **Medium business** – Medium business with higher water use e.g. a cafe, hairdresser or garden nursery (360KL per year).

Bill impacts were provided as both a dollar change per bill, and the percentage change from the average bill.

	Pensioner household Change per four-monthly bill \$0.00 (0.0%)
	Small household Change per four-monthly bill \$0.00 (0.0%)
	Medium household Change per four-monthly bill \$0.00 (0.0%)
	Large household Change per four-monthly bill \$0.00 (0.0%)
	Medium business Change per four-monthly bill \$0.00 (0.0%)

D. Methodology



All six Bill Simulator questions were visible on a single survey page. The cumulative tally of bill impacts was shown in the customer tiles, so respondents could re-adjust their responses as they went along to provide the optimal balance.

After completing the Bill Simulator page of the survey, the following page asked respondents to review a summary of the bill impacts based on their preferences. This was included to try to make sure that respondents knew the impact of their recommendations. Despite designing the simulation in a way that encouraged users to “play around with their choices”, the confirmation page ensured people did not think it was a game.

Thank you for having your say. Before continuing, please check over the advice you're giving us. These are the price impacts of your preferences. Any changes to the inflation rate will also be added to the bills shown below.

We are faced with some important choices that have real bill impacts for our customers. This includes the bill increases related to building the Belmont desalination plant which was a key element of the Lower Hunter Water Security Plan (LHWSP).

Customer type	Current average bill	Plus LHWSP costs	Plus your suggested changes	New total per bill
Pensioner household	\$225.00	\$254.00	\$3.00 (+1.2%)	\$257.00
Small household	\$352.00	\$392.00	\$4.00 (+1.0%)	\$396.00
Medium household	\$415.00	\$455.00	\$4.20 (+0.9%)	\$459.20
Large household	\$514.00	\$554.00	\$6.10 (+1.1%)	\$560.10
Medium business	\$1,340.00	\$1,499.00	\$16.50 (+1.1%)	\$1,515.50

**Hunter Water sends bills to customers every four months*

If you are finished with your choices, please click the 'Continue' button.

If you would like to adjust your responses, please click the 'Back' button.

Presenting the results of the bill simulator

Working out how to show you the answers from the Bill Simulator wasn't easy. You would have seen in the screenshots above that the bill impact was different for different types of customers. Not only that, but we can't know which type of customer was motivating the user as they responded to the simulator. Were they thinking about society overall, or about themselves, their future selves, or perhaps a family member with limited ability to pay?

Ultimately, all the decisions that are made by this Community Panel get added up to find out what Hunter Water's total **revenue requirement** is – that's how much money the corporation needs to collect from its customers. The revenue requirement is then divided up among the customer types so that Hunter Water's costs are covered.

So, for the Bill Simulator outputs in this report we've shown you what the customer choices add up to in terms of a change to the revenue requirement. The rules state that money spent on operational things is added to the revenue requirement in the year when it is spent. Money spent on long term assets such as pipes and pumps gets added to the revenue requirements across the decades when it will be used. So, \$1 million in operational expenses has a much bigger immediate impact on bills than \$1 million in capital spending; but \$1m in capital spending has a bigger impact overall, since interest needs to be paid on the money over the life of the asset. See Chapter 4 for a more detailed description of how operating expenditure and capital expenditure affect customer bills.

D. Methodology

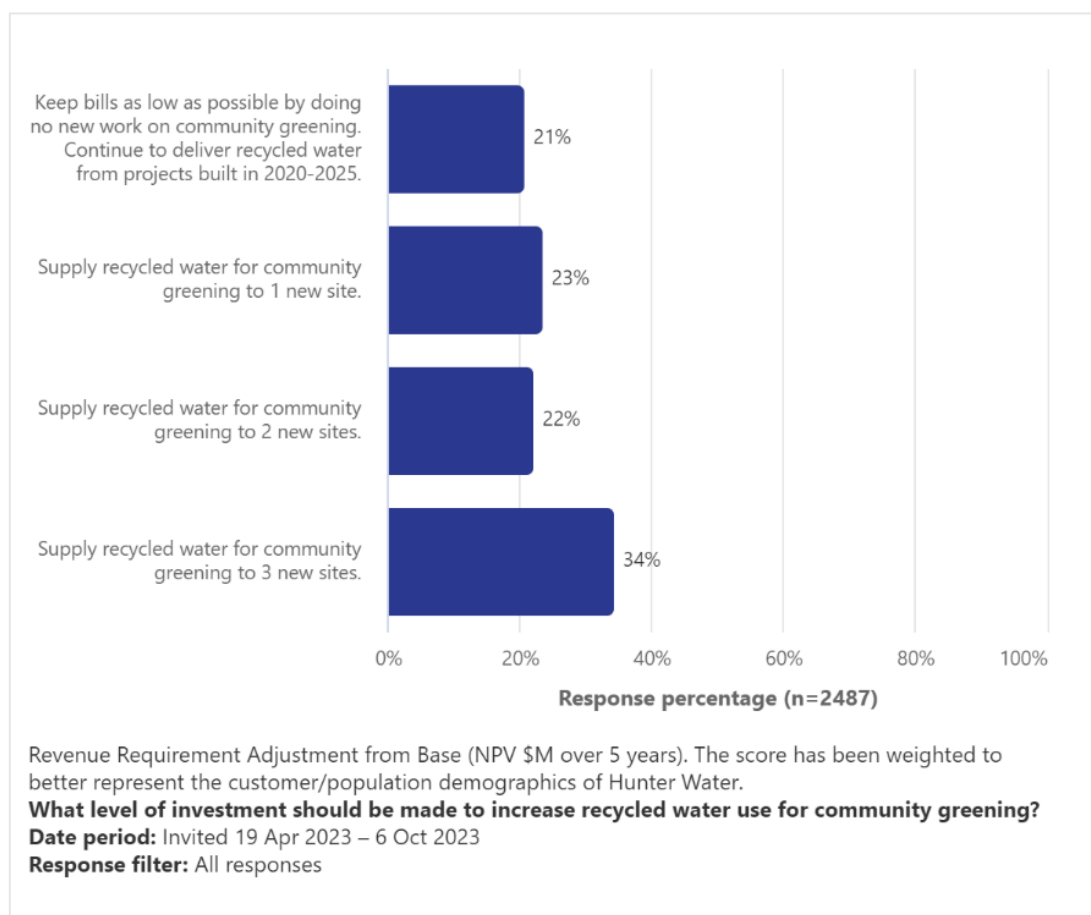


In Figure D.2, you can see what proportion of people chose each of the four snap points in the Bill Simulator. Each snap point represents a change to the revenue requirement, and when those increases and decreases are added up, we get a suggested increase of \$2.3 million over five years.

You'll also see the change in the revenue requirement suggested by different types of customers throughout the report. For example, the difference by financial situation or concession and non-concession card holders.

Figure D.2 – Bill Simulator result on recycled water for community greening (Weighted Revenue Requirement: \$2.3M)

What level of investment should be made to increase recycled water use for community greening?



Re-weighting the surveys

In the previous chart and in the rest of the report the average figures coming from the surveys have been modified so that they represent the real community sentiment more accurately. You can see the word “weighted” in the previous chart: “Weighted Revenue Requirement \$M”.

There are many different types of people in the community. Some are more interested in water than others – for example some people are highly focused on reliability. We wanted to make sure that the results weren’t “hijacked” by only people who were “passionate about water”. A common (and reasonable) concern is that only “water warriors” would fill out surveys like these, so that the results aren’t representative. We compared the level of interest in water of the people responding to the Bill Simulator with the general population². There were more customers “very interested in water” responding to the Bill Simulator than in the population, yet fewer customers with “close to zero interest in water”. The data have been re-weighted to better represent the whole community.

How illegitimate responses were handled

On Thursday 20 April 2023, it was brought to Hunter Water and Insync’s attention that members of the ‘My Place’ group were sharing the Bill Simulator and Priorities survey with non-Hunter Water customers and encouraging them to submit illegitimate survey responses.

It became apparent that the My Place members were concerned about digital meters being used as a tool for government surveillance and were against any form of carbon mitigation. As such, they encouraged their members to submit responses against these two initiatives in the Bill Simulator and Priorities survey.

Insync reviewed the IP addresses of all responses and removed the responses from locations outside of New South Wales.

Loaded and leading or fair and authentic?

Most people have had the experience of feeling like a survey was designed to get them to answer in a certain way. In the surveys, Hunter Water asked people “How did you find this exercise?” and the three options were “Fair and authentic”, “No opinion” and “Loaded and leading”. The results are shown in Table D.1. They are a bit higher than average for a study of this type³, but similar to other corporations where there is also a large, unavoidable price rise.

² The Water Services Association of Australia does a survey where people are invited to participate, which tells us how common each persona is in the population.

³ Below 10% of ‘loaded and leading’ responses is good, 10 to 15% is acceptable, and above 15% is poor.

Table D.1 – Perceptions of survey bias

	Priorities survey responses	Bill Simulator responses
Fair and authentic	58% (n=1,631)	63% (n=1,456)
No opinion	29% (n=826)	27% (n=616)
Loaded and leading	13% (n=377)	10% (n=228)

Note that the “loaded and leading” cohort were far more likely to be male. Overall, the gender split was 47% female and 50% male, but in the loaded and leading group it was 36% female and 56% male.

People who said that the survey was “Loaded and leading” were then asked, “What would need to change for you to feel that the exercise was fair and authentic?”.

A range of comments have been included below. Choosing them from among many others was a difficult, subjective task. If you want the entire list, just ask.

Priorities survey - “Loaded and leading” comments

- “When you provide options don't just provide the one consequence that you have thought of. There's many consequences, but also many advantages. Think outside the box.”
- “Whichever way you answer you will pay more, even for rectifying poor service provision I believe the first step is to look inward at culture and performance.”
- “Get back to the basics of supplying and maintaining the water supply to the people!”
- “Stop worrying about zero carbon emissions we only have 2% anyway. Just worry about affordability for your customers.”
- “I'm quite comfortable that presenting conclusive options is loaded and leading, as it helps with your data analysis and gets straight to the point. But you may wish to introduce some qualitative elements such as a free text field at the base of some sections to ask respondents for related suggestions, instead of leaving this until the end of the survey.”
- “Keep bulls**t like carbon neutral out altogether, and provide safe drinking water, sewerage and stormwater at lowest cost to customers!”
- “Everything suggested passes the costs onto customers. How about Hunter water also absorb some costs and reduce your profits?”
- “I think some of the answers were double barreled. The answers were long and I started to lose interest, and then just made a quick decision.”
- “Stop trying to pass it onto the people, questions were leaning to the customer to fix these problems, it's not our problem its yours ... my bills from hunter water increases dramatically every year and you are now saying we have to pay more to fix the old system ... pfft bring on competition.”
- “You are pushing the agenda of climate change which is a hoax. Looking at the way the weather works in 30-35 year cycles, there is no global warming. Governments are deliberately scaring people with falsified science and the deliberate twisting of facts. Talk to the real scientists and study the unadulterated data from around the world and you see the real truth. We are being lied to. People who point out the facts and show where figures have been falsified are ridiculed, so as to keep the agenda going. The way some of your early questions in this survey are written, all the options accept climate change as something we need to address. Real science shows that the more CO2 you have in the air, the faster plants grow. The people pushing the climate change agenda are also behind the destruction of the world's food supplies.”

D. Methodology



- “Questions asking for feedback need to have factual figures to consider, simply saying it will increase costs is not enough detail to provide an educated response, we need to know how much a bill will increase by with each action and then decide if that has our costs/benefit analysis. Hunter Water should focus on their core responsibly and provide services at the lowest possible price.”
- “The wording of the questions were at times emotional and should have been less leading. I understand that you want people to be informed when they answer but this should not have been added to the questions.”
- “Many questions did not seem to provide the full range of alternatives, hence restricting the value of answers.”
- “Allow for leaving response blank or be marked other with a comments box - there were questions that didn't have an option I was comfortable with but was forced to select something to continue.”
- “More realistic questions with appropriate answer choices on what a person needs from Hunter water in this time of rising expenses. The individual house should not be asked to supplement or balance out industry expenses.”



Bill Simulator - “Loaded and leading” comments

- “Sneaky. Get us to agree to great changes, then at the end show you want us to pay for it all. Bad try. Stop all your greeny rubbish. God gave us water to use. It is a blessing.”
- “Like all surveys this one is worded to provide as close as possible the outcome from it that Hunter Water desires.”
- “All costs are passed onto customers. How about Hunter water contribute to the costs and reduce profits?”
- “I feel you are about to up our water bill again and are trying to justify it with leading questions in this survey.”
- “You have an agenda and are not honest with yourselves and the customers.”
- “A survey that addresses the major component of the current water rates, not the cost of water. It is the sewerage costs that are the major component for most average consumers. And since most house owners have no choice as to who provides this service, we are helpless in trying improve our overall costs.”
- “As I said framing the survey as lower bills vs greener technology is shameful. Green technology does not come at a great cost. Do better with your existing maintenance budget.”
- “That the best interests of customers were actually the end result you are after. It seems this is just to justify the inevitable huge increase in water cost that is coming our way. Desal is an expensive solution with future unknown electricity prices only going to go up.”
- “You told me what it would cost me to save the planet. It is what it will cost us all if you don't step up and do your bit and maybe make some savings on consultants and management wages.”
- “I feel that some of the questions are leading and some multiple choice questions are without an answer that accurately reflects my opinions.”
- “You only have households and medium business, show us what everyone is paying for water especially big business.”
- “I feel like you are shifting the onus of environmental responsibility onto your customers. This is not the first time this has happened. I think you need to rethink your business model and remove the people in higher level management that put it in place.”
- “Say what investment you are contributing in these measures/exercises BEFORE increasing your fees. Explain why you are slugging customers with more fees rather than investing it these exercises with your own money. You are a massively profitable entity and you need to invest your own money instead of increasing customer costs!!”
- “We all want better services and I would prefer to see a business statement from Hunter Water who should know what they are doing and then ask for comments on the statement. I am not a scientist or water expert.”
- “There were no choices or information presented about whether HWC could take other actions to offset increased investment in order to deliver better services. All the choices to keep prices low(er) indicated that significant and important changes to improve customer services and protect the environment would not be made.”

Did people really think that Hunter Water could deliver the options that were being presented?

One final consideration that might give the Community Panel confidence (or not) in the results is whether or not survey respondents thought that Hunter Water could actually deliver the options that were being presented. If not, then perhaps people would think that the exercise was hypothetical, and that belief might change the way they responded.

One thousand one hundred and five people thought that Hunter Water could deliver, 889 didn't know, and 324 thought it couldn't. Across all questions, this third group had much lower willingness to pay. This observation interlocks with the "loaded and leading" question. Twenty-eight percent of people who thought that Hunter Water couldn't deliver also thought the survey was loaded and leading, compared to just six percent of those who thought Hunter Water could deliver, and eight percent of those who didn't know.

Login details for results portals

To be completely transparent, Insync has set up a login for the Community Panel to access the survey results in full. You may use the below login details to access Insync's online results portals.

[Priorities Survey Results Portal \(insyncsurveys.com.au\)](https://insyncsurveys.com.au)

[Bill Simulator Results Portal \(insyncsurveys.com.au\)](https://insyncsurveys.com.au)

Login: pricing.engagement@hunterwater.com.au

Password: CommunityPanel@2024



E. Summary of responses analysed for this report

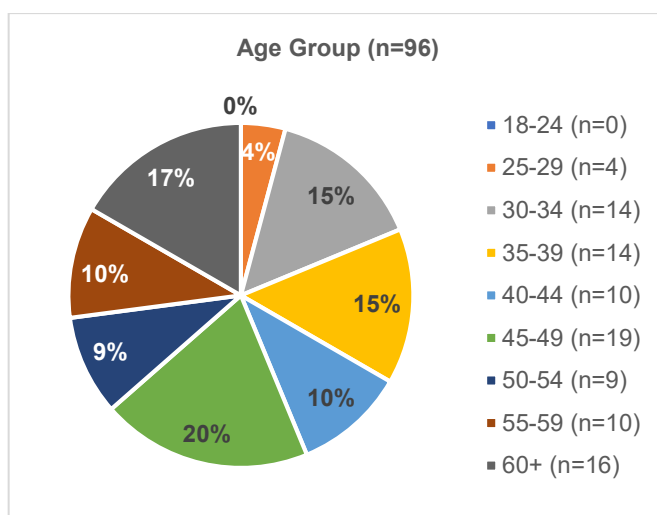
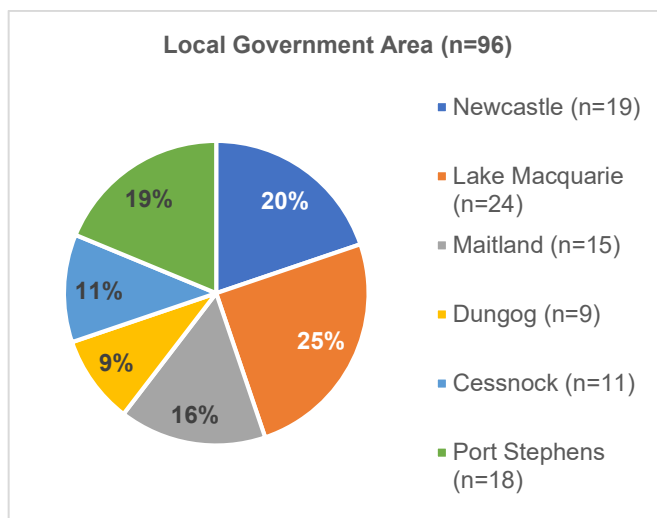
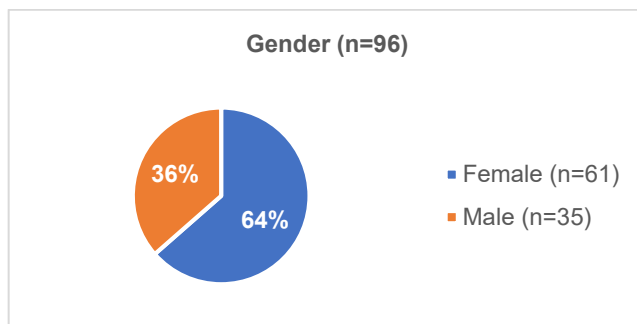


Summary of responses analysed for this report

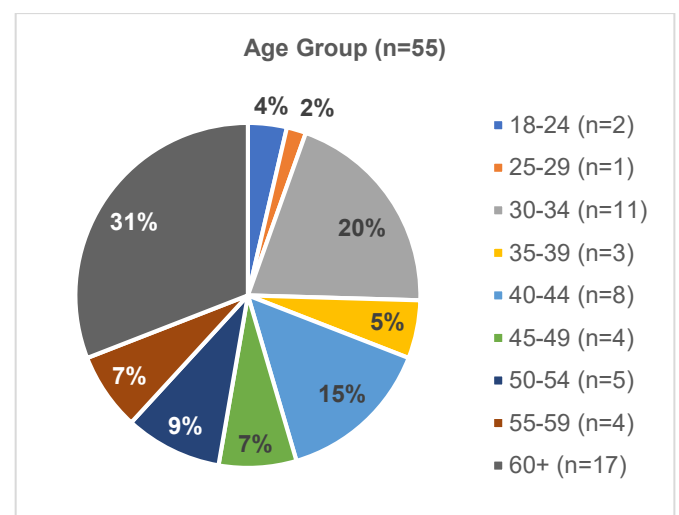
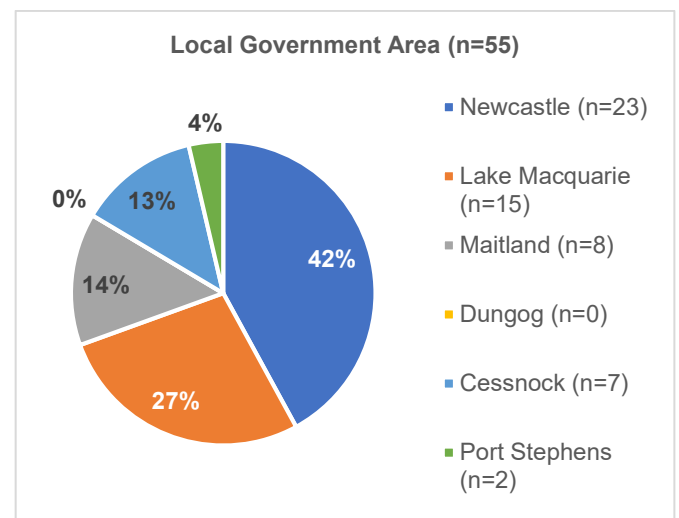
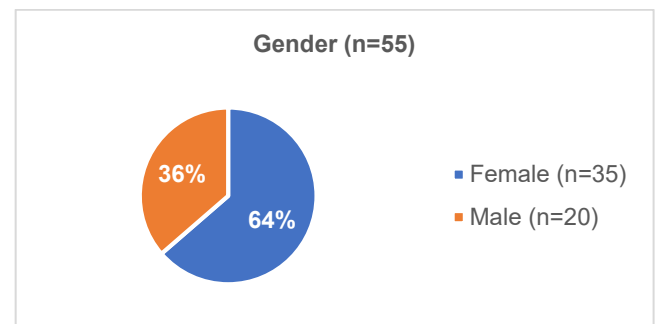
More than 6,500 customer responses have been analysed for this report.

This section provides detail on the customer responses incorporated in this report.

Specific response statistics: Listening posts



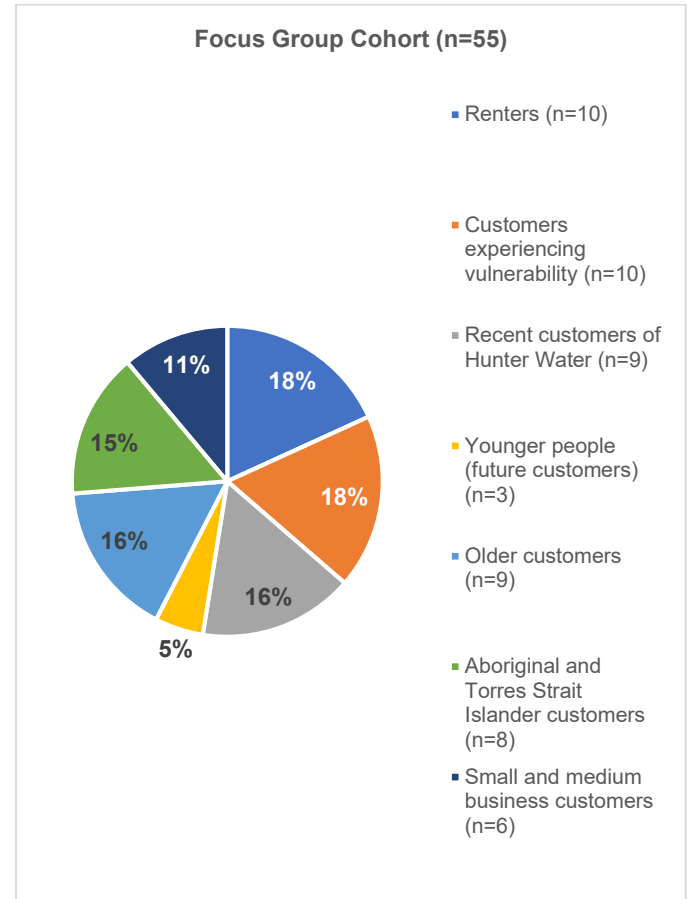
Specific response statistics: Exploration focus groups



E. Summary of responses analysed for this report



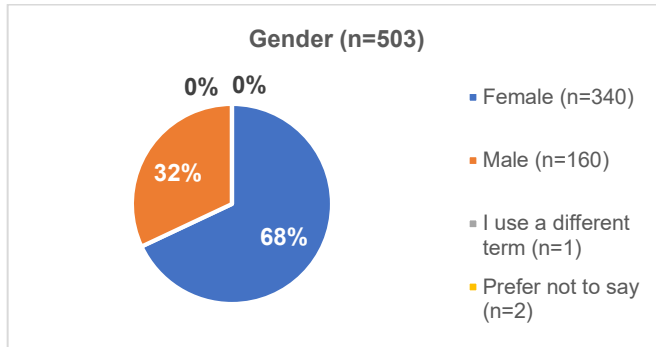
Specific response statistics: Exploration focus groups



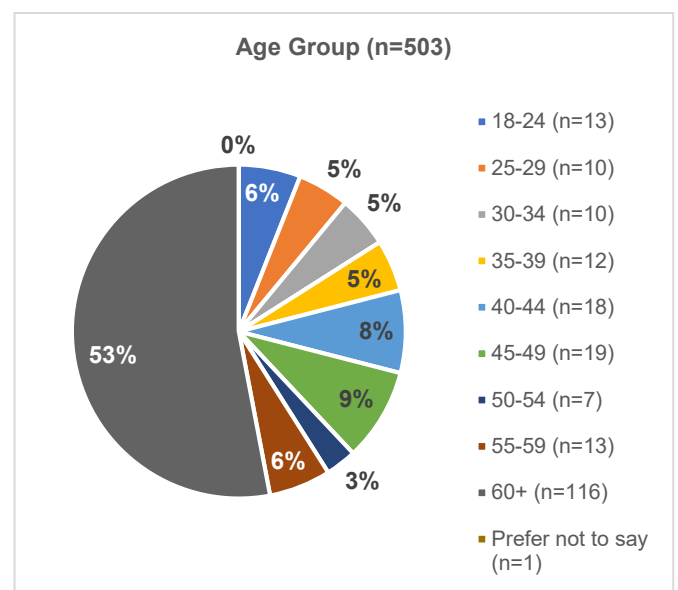
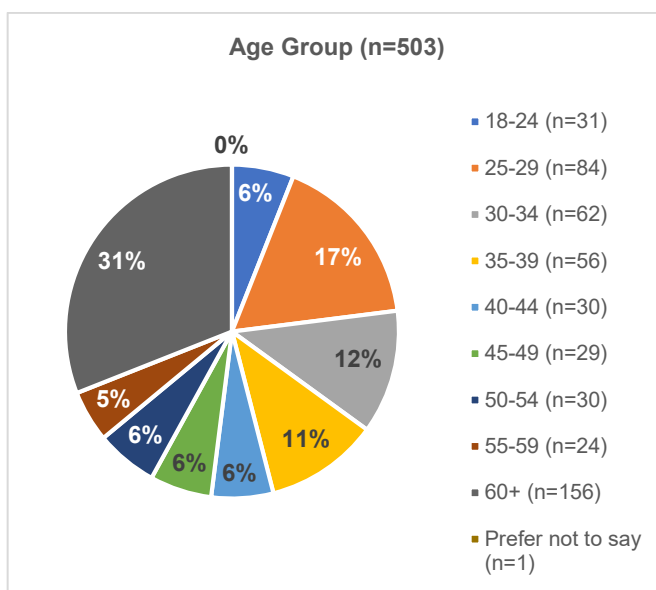
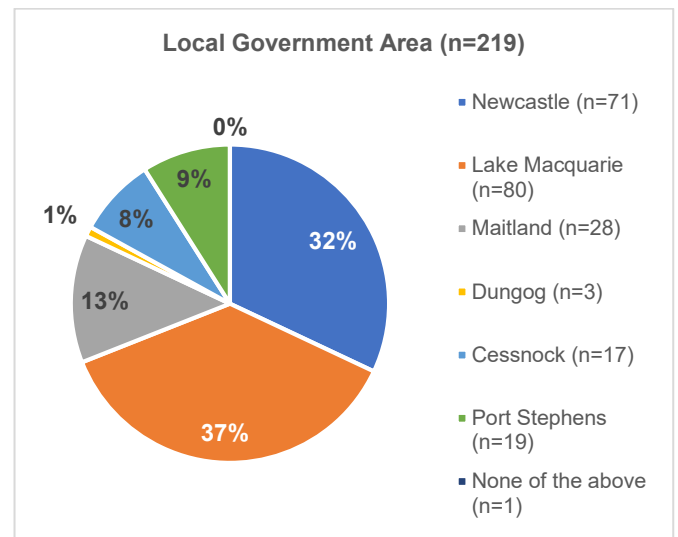
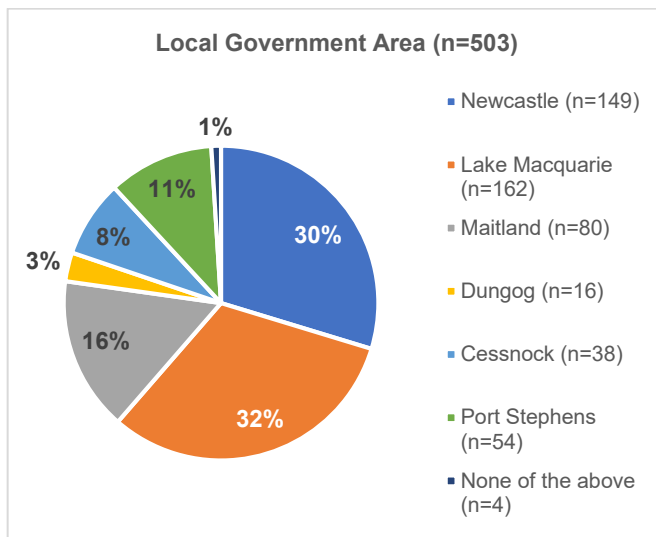
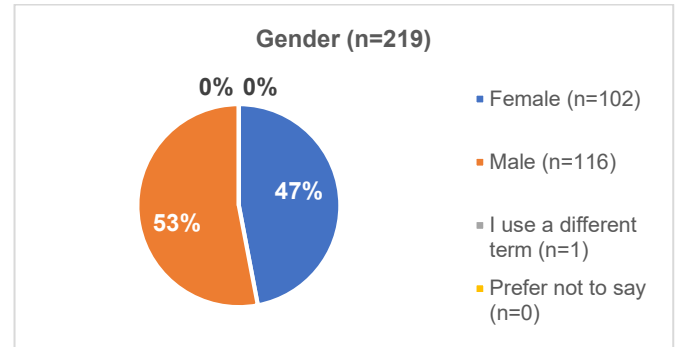
E. Summary of responses analysed for this report



Specific response statistics: Quarterly survey (August 2022)



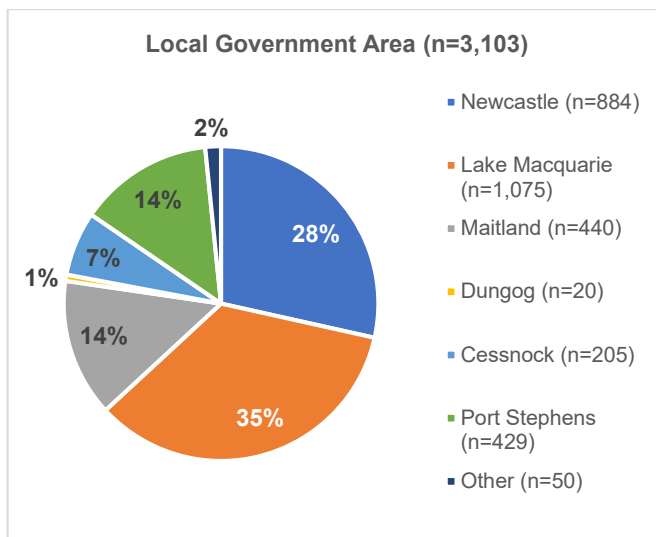
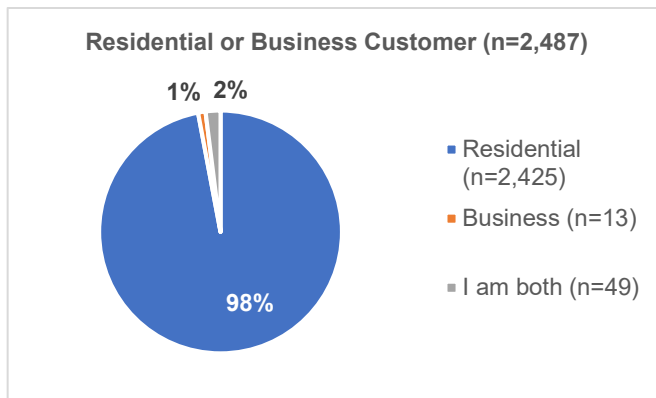
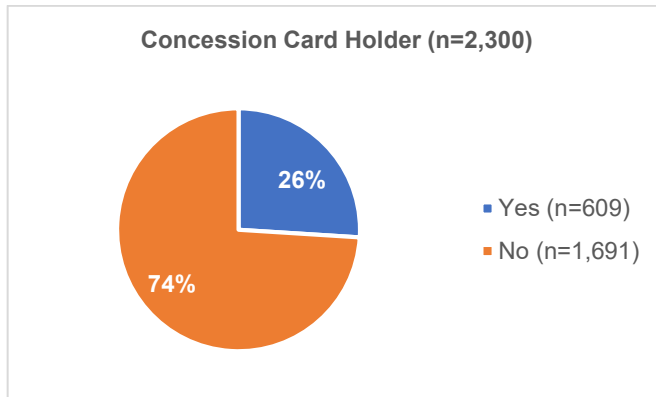
Specific response statistics: Quarterly survey (November 2022)



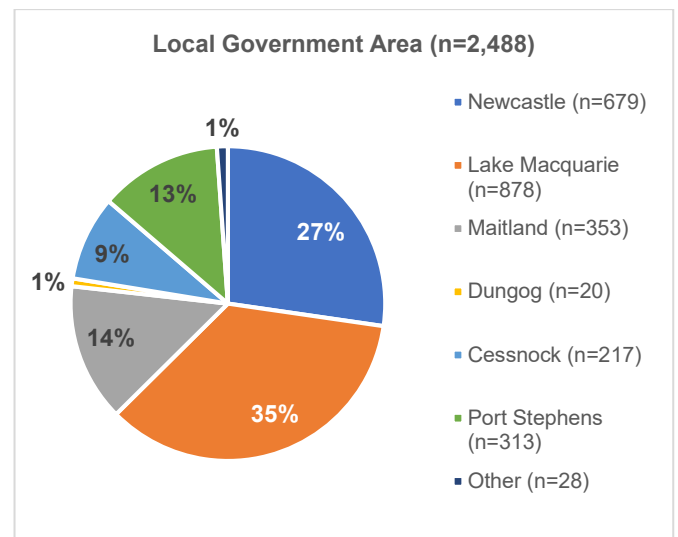
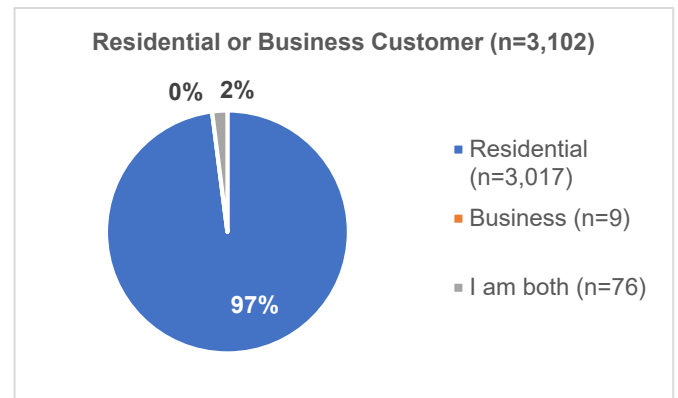
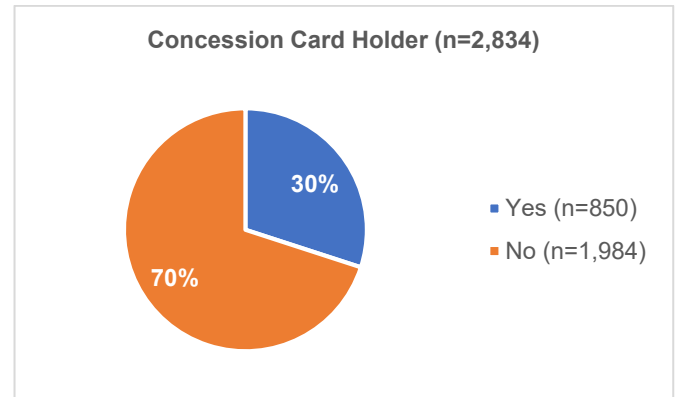
E. Summary of responses analysed for this report



Specific response statistics: Bill Simulator



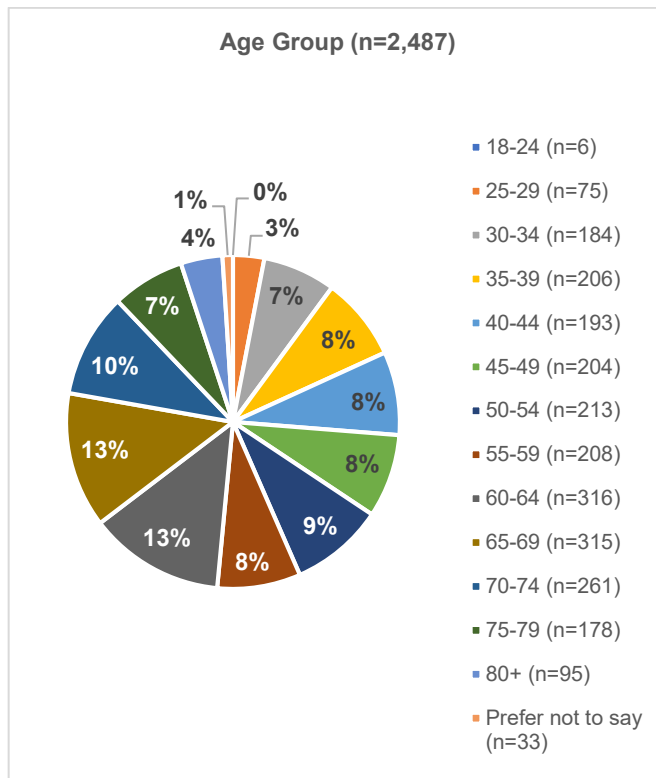
Specific response statistics: Priorities survey



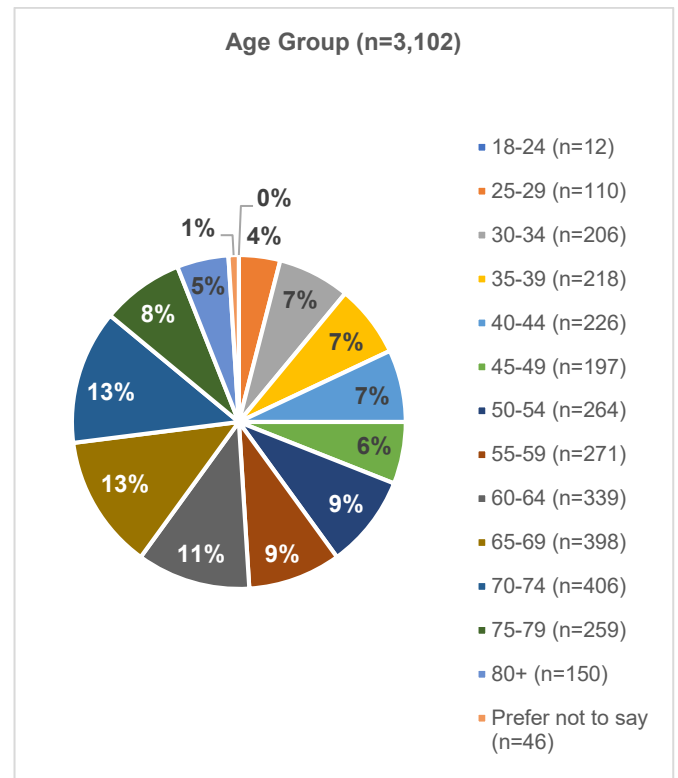
E. Summary of responses analysed for this report



Specific response statistics: Bill Simulator



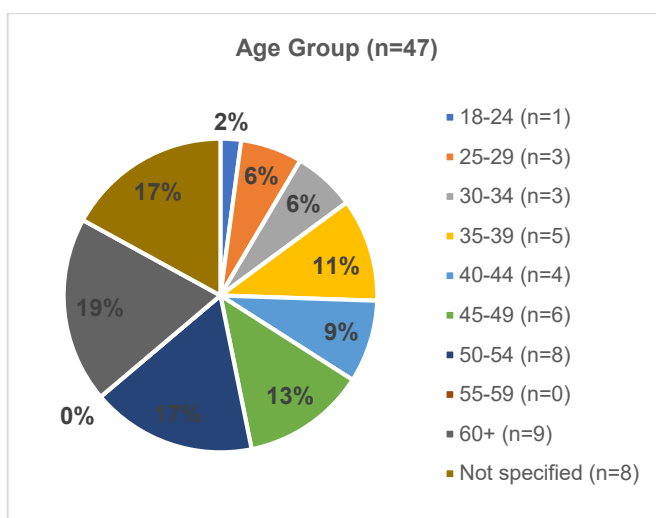
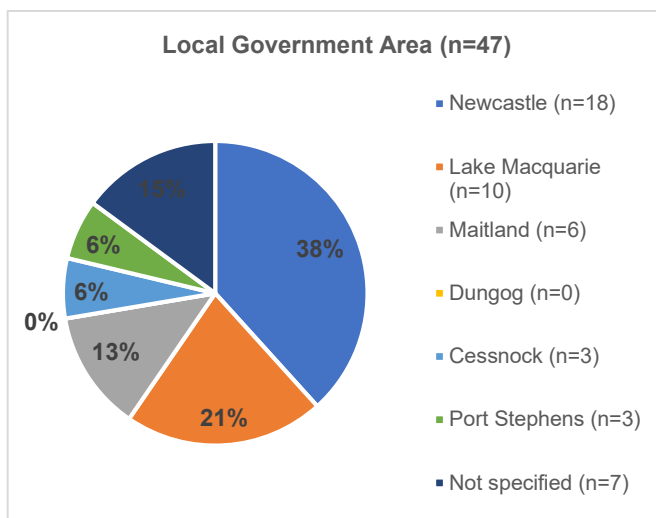
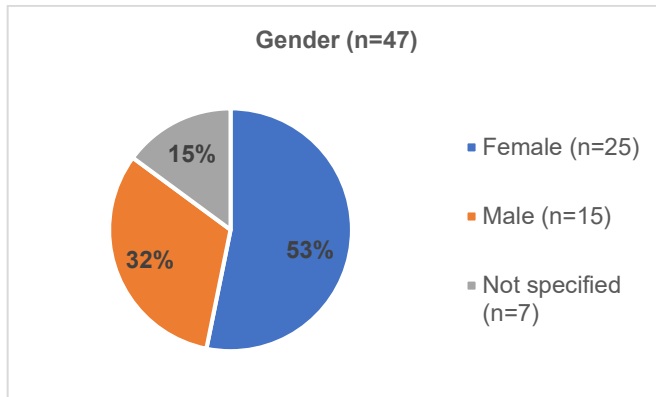
Specific response statistics: Priorities survey



E. Summary of responses analysed for this report



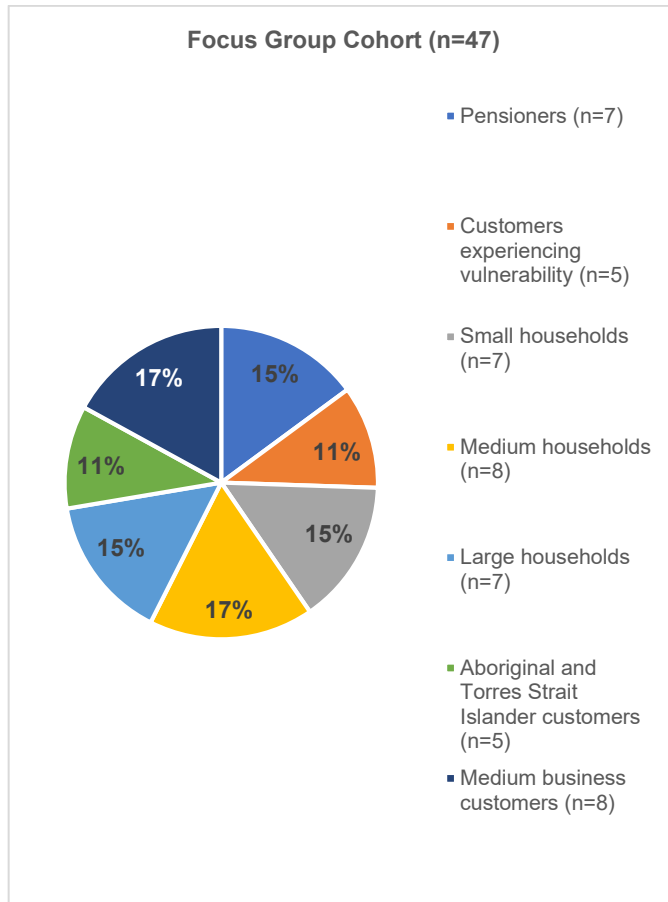
Specific response statistics: Valuation focus groups



E. Summary of responses analysed for this report



Specific response statistics: Valuation focus groups



F. Useful links



Hunter Water Community Engagement Strategy

<https://www.hunterwater.com.au/documents/assets/src/uploads/documents/Plans--Strategies/Community-and-Engagement-Strategy.pdf>

Hunter Water 2025-2030 Pricing Proposal web page

<https://www.hunterwater.com.au/haveyoursay/haveyoursay/2025-2030-price-proposal/2025-2030-pricing-submission-phase-3>

Hunter Water Corporate Strategy web page

<https://www.hunterwater.com.au/about-us/our-commitment-to-you/strategic-priorities>

Hunter Water Lower Hunter Water Security web page

<https://www.hunterwater.com.au/our-water/water-supply/water-in-the-lower-hunter/lower-hunter-water-security-plan>

Hunter Water Customer, Consumer and Community Consultation Procedure

<https://www.hunterwater.com.au/documents/assets/src/uploads/documents/Plans--Strategies/Hunter-Water-Customer-Consumer-and-Community-Consultation-procedure.pdf>

Hunter Water Sustainability Strategy

<https://www.hunterwater.com.au/documents/assets/src/uploads/documents/sustainability-strategy.pdf>

Hunter Water's 2022-2027 Operating Licence

<https://www.hunterwater.com.au/about-us/publications/operating-licence>

Hunter Water's Customer Contract and a downloadable summary of the contract

<https://www.hunterwater.com.au/about-us/publications/customer-contract>

Hunter Water's 2022-23 Compliance and Performance Report describing what we did to comply with our Operating Licence <https://www.hunterwater.com.au/documents/assets/src/uploads/documents/Other-Reports/Regulatory-Reports/Compliance-and-Performance-Report-2022-23.pdf>

Word/ Abbreviation	Description
Board	Hunter Water's Board of Directors. A list of Directors, along with their skills, qualifications and experience are listed at https://www.hunterwater.com.au/about-us/our-business/the-board
Building block model	The financial model used by IPART to convert costs into a revenue requirement.
Capital expenditure (CAPEX)	Costs that a business incurs when acquiring, upgrading or maintaining physical assets, with the expectation of long-term benefits.
Carbon offset	A compensation for emissions by undertaking actions that remove emissions from the atmosphere or investing in projects that would avoid, reduce, or capture emissions generated by others.
Catchment	A natural drainage area used for the collection of rainfall.
Climate change	The long-term alteration in temperature, precipitation, and other atmospheric conditions, largely resulting from human activities such as the burning of fossil fuels and deforestation.
CO ₂ e	Carbon dioxide equivalent
Cognitive Bias	The tendency to simplify information through our own personal experiences or preferences, resulting in misjudgements in reasoning or decision-making.
Community Panel	Hunter Water's 2025 Pricing Proposal Community Panel
Corporate Strategy	A plan that outlines the long-term goals and direction of Hunter Water, including how we aim to achieve our objectives as an essential service provider.
Customer Contract	Outlines the rights and obligations of users of Hunter Water's services and sets out minimum standards of customer service. Forms part of the Operating Licence.
Customer Engagement Advisory Panel (CEAP)	A panel of experts that provide critical feedback to Hunter Water on the quality of its Customer Engagement Program.
Customer Outcomes	The key things that our customers, consumers and the community tell us are most important to them. They describe <i>what</i> customers want us to deliver in terms of the desired change or benefit, while maintaining flexibility on <i>how</i> we deliver.
Deliberative Forum	A deliberative forum enables community members to participate in a democratic decision-making process that will have a real public impact. It is comprised of a diverse and broadly representative group of customers and community members, selected through an independent process to ensure fair representation of age, gender and other demographics. This is the process that will be followed by the Community Panel.
Depreciation	The decrease in the value of an asset over time due to wear and tear.
Desalination Plant	A facility that removes salt and other minerals from seawater or brackish water to produce fresh water that is suitable for human consumption or for various industrial purposes.

Word/ Abbreviation	Description
EPA	NSW Environment Protection Authority, responsible for protecting the environment and the community by regulating activities that can impact the environment, such as waste management, pollution control, and the use of natural resources.
First Nations Peoples (FNPs)	People who identify as Aboriginal and/or Torres Strait Islanders.
Fixed charge / service charge	The component of a bill that all customers pay. The amount does not vary with usage.
Framing Bias	A type of cognitive bias in which we are influenced by the way information is presented, affecting perception and decision-making.
Greenhouse Gas (GHG) Emissions	The release of gases like carbon dioxide, methane, and nitrous oxide into the atmosphere. These gases trap heat from the sun, causing the Earth's temperature to rise and leading to global warming and climate change.
Groundwater	Water found underground in the cracks and spaces in soil, sand, and rock.
Hotspot(s)	Customer service connections that are repeatedly affected by a service problem that relates to bad odours, low water pressure or wastewater overflows (during wet weather).
IAP2 Spectrum	The International Association for Public Participation's framework that defines the scope and level of input the community has over the decision-making process.
Intergenerational equity	The concept of fairness in the distribution of resources and responsibilities between present and future generations. It emphasizes the idea of ensuring that the needs and interests of both current and future generations are considered when making decisions.
Intergovernmental Panel on Climate Change (IPCC)	The United Nations body for assessing the science of climate change. They assess scientific data to help policymakers understand the impacts of climate change and develop strategies to address it.
Insync	Independent engagement research partner.
IPART	Independent Pricing and Regulatory Tribunal
Kilolitre	Measure of water (1000 litres).
Lower Hunter Water Security Plan (LHWSP)	A strategic plan that encompasses a whole of government approach to ensure the Lower Hunter has a resilient, secure and sustainable water supply, now and for future generations. The plan includes new sources of water and ways to reduce the water we currently use. It includes a range of supply and demand measures that will better prepare us for drought and to meet the needs of homes, businesses and industry in the future.
Megalitre	Measure of water (1,000,000 litres).
Miromaliko Baato	Hunter Water's Corporate Strategy
Operating expenditure (OPEX)	Ongoing costs that a business incurs during the course of normal operations, such as salaries, rent and electricity costs.

Word/ Abbreviation	Description
Operating Licence	Sets the terms and conditions that Hunter Water must adhere to.
Pandemic	The global outbreak of the COVID-19 virus.
Performance Measures	How we measure our success delivering on the Customer Outcomes.
Potable	Water that has been treated and complies with drinking water standards and guidelines.
Pricing Proposal	A plan that outlines proposed services and prices in water and sewerage over a five-year period. The proposal is submitted to IPART, who runs a transparent review process then sets our prices based on a revenue requirement.
Purified Recycled Water	Wastewater that has been recycled from industry and homes (including showers, toilets, bathrooms and kitchens) to remove impurities and meets strict Australian Guidelines for use as a drinking water source.
Outcome Delivery Incentive (ODI)	A financial reward for outperforming a target or a financial penalty for underperforming against a target associated with a customer outcome. There are no ODIs for 2020 to 2025. There may be ODIs for 2025 to 2030.
RAP	Hunter Water's Reconciliation Action Plan, reflecting the commitment to create improved economic, health and social outcomes for Aboriginal and Torres Strait Islander peoples.
Regulator	A person or body that supervises a particular industry or business activity.
Regulatory Asset Base	The total value of the assets that are used to deliver water, wastewater or stormwater services.
Revenue requirement	The amount of revenue Hunter Water needs to collect so it can cover its cost of providing services.
Sewage	The waste that is produced by people.
Sewerage	The infrastructure needed to deliver wastewater services.
Stormwater	Rainwater the runs off buildings and land.
Stormwater Harvesting	Collection and storage of stormwater from urban areas which can be reused to water public parks, gardens, sports fields and golf courses.
Traditional Owners	Refers to Aboriginal and/or Torres Strait Islander people in a specific area who have ancestral ties to the land, often with a cultural, spiritual, and historical connection to the region. Traditional owners exercise control over land through land councils.
United Nation's Sustainable Development Goals	A set of 17 global objectives aimed at addressing key challenges, like poverty and environmental issues.
Variable charge / usage charge	The component of a bill that changes with usage volume.

Word/ Abbreviation	Description
WACC	The weighted average cost of capital – the average rate a utility pays to finance its assets. The WACC is used to calculate the return on assets, as part of the building block model.
Wastewater	Any water that has been used and discarded. It typically contains various contaminants and pollutants, including organic and inorganic substances, and requires treatment before being safely released back into the environment.
Water Conservation	The careful management, usage, and preservation of water resources to ensure sustainability and a reliable supply of clean water for present and future generations.
Water Security	Sustainable access to adequate quantities of an acceptable quality water. The ability to supply enough water to meet customer needs over the longer term without long or frequent restrictions on how or when water is used.
WTP	Water Treatment Plant
WWTW	Wastewater Treatment Works (also called Wastewater Treatment Plant).