Hunter Water Community Panel

Deliberative Forum Report
March 2024

Executive Summary

Executive Summary

Hunter Water develops a pricing proposal to submit to the Independent Pricing and Regulatory Tribunal (IPART) every five years. The pricing proposal sets out the efficient cost of providing services and must reflect the views of customers and the community. The community panel was undertaken to ensure that the values and priorities of the community were well understood and reflected in the corporation's pricing proposal for 2025-2030.

The Hunter Water community panel took place over five full days and one evening between November 2023 and March 2024. As a type of deliberative forum, it complied with the OECD's Good practice principles for deliberative processes (see Figure 1), and references IPART's principles for good practice customer engagement as set out in Section 3.1 of the Water Regulation Handbook v2 July 2023 (see Figure 2).

IPART does not prescribe the method by which a utility should engage with its customers. It does, however, expect that a business demonstrate how it would engage with its customers in a meaningful way to understand their needs and preferences, and that these insights are used to inform its proposal. A well-developed customer engagement plan with supporting evidence is one of the qualities of a high-quality pricing proposal. IPART's 3Cs model draws heavily on the Essential Services Commission's PREMO model. Determinations based on that model show that regulators are far more comfortable approving a revenue requirement which has been driven by groups of customers who have been given adequate time and information to apply their wisdom to the wicked problem of balancing the needs of different customer types.

In addition to complying with relevant regulations and guidelines, the design of the engagement was influenced by a Customer Engagement Advisory Panel. This group of sophisticated stakeholders interrogated Hunter Water's plans and offered many valuable suggestions for improvement, many of which were incorporated.

A representative group of approximately 30 customers were selected by a specialist independent recruiter using a random, stratified process.

This group came together to deliberate over the following 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 generationers, and keeping prices affordable?"

This challenge was addressed through three key topic areas, which had arisen over the course of an engagement effort lasting more than a year:

1. **Hot spots:** Our challenge of providing reliable, high-quality services,
2. **Water conservation**: Our challenge of providing reliable services by making sure there is enough water for today and tomorrow, and
3. **Carbon reduction**: Our challenge of protecting the environment.

Throughout the engagement process, customers had provided insights regarding the topics they wanted to be included for deeper, deliberative engagement. The three focus areas that were in scope for deliberation were those with material bill impacts and the greatest latitude for customers to influence the course of action.

The panel was invited to "Collaborate" (referring to the IAP2 levels of public participation) with Hunter Water on all three topics. Hunter Water made a promise to the panel to "look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible" (IAP2, 2018).

The panel was observed by Hunter Water directors, executives, and independent members of the Customer Engagement Advisory Panel.

Executive Summary

The panel was provided with a set of materials which articulated the problem, including data on community attitudes from prior research. Participants were given access to 10 internal and eight external expert speakers including representatives of those experiencing financial vulnerability. Participants were also asked to identify their own information gaps and who they trusted to fill those gaps. The sessions were observed and critiqued by independent experts throughout.

Participants were provided with an overview of the 'baseline' bill impact. This is comprised of bill impacts associated with investment decisions already made, essential expenditure required to meet regulatory drivers, the cost of borrowing, and interest rates etc. The panel made their topic recommendations for any additional expenditure with the full knowledge that this would be on top of the baseline bill impact.

Cost of living pressures, and the needs/preferences of those who were struggling to make ends meet were given special prominence in the written materials provided to the panel. This cohort's needs were also featured in verbal presentations.

After extensive deliberation, a majority position was reached on the recommendations for all three topics:

- On **hot spots**, the panel recommended that Hunter Water prudently and efficiently invest $3-$5[1] million during the next price period to fix all Priority 1, 2 and 3 wet weather overflow issues, most Priority 1 odour issues, and half of Priority 1 low water pressure issues.
- On **water conservation**, the panel recommended that Hunter Water prudently and efficiently invest $5 million during the next price period – $4 million to reduce leaks from the Hunter Water system, and $1 million to encourage customers to use less water.
- On **carbon reduction**, the panel recommended that Hunter Water prudently and efficiently invest up to $1 million during the next price period to power the proposed Belmont desalination plant with renewable energy, which would enable the corporation to achieve an 80% reduction in carbon emissions by 2030. However, the panel added a caveat that if Hunter Water achieves this target for less than the allocated sum, then the remaining moneys should be directed back to customers at the end of the five year period.

As a result of rigorously prepared business cases, the panel members knew what they would be getting for the money they agreed to pay in each of the three focus areas. Hunter Water also mentioned that it would convene a subset of the panel to consider accountability as part of its stage four customer engagement. This concept provided additional trust and confidence that Hunter Water would deliver the panel's recommendations to the maximum extent possible and not re-deploy the additional revenue requirement for something else.

There are four parts to this report. The **first chapter** provides background to the **process** including how the participants were recruited. The **second chapter** describes the **content and structure** of the community panel, and the **third chapter** reports the **decisions** in detail. The report concludes with a summary of **next steps** and a set of **appendices** which provide a written record of the materials used.

[1]After the panel completed their vote on the level of investment for hot spots, Hunter Water provided further advice that the revenue requirement range would fall closer to $3-$4 million. The group supported this revision.

Figure 1 – OECD Principles checklist

OECD Principles	Checklist
Purpose: The objective should be outlined as a clear task and is linked to a defined public problem. It is phrased neutrally as a question in plain language.	
Accountability: There should be influence on public decisions. The commissioning public authority should publicly commit to responding to or acting on participants' recommendations in a timely manner. It should monitor the implementation of all accepted recommendations with regular public progress reports.	
Transparency: The deliberative process should be announced publicly before it begins. The process design and all materials – including agendas, briefing documents, evidence submissions, audio and video recordings of those presenting evidence, the participants' report, their recommendations (the wording of which participants should have a final say over), and the random selection methodology – should be available to the public in a timely manner. The funding source should be disclosed. The commissioning public authority's response to the recommendations and the evaluation after the process should be publicised and have a public communication strategy.	
Representativeness: The participants should be a microcosm of the general public. This is achieved through random sampling from which a representative selection is made, based on stratification by demographics (to ensure the group broadly matches the demographic profile of the community against census or other similar data), and sometimes by attitudinal criteria (depending on the context). Everyone should have an equal opportunity to be selected as participants. In some instances, it may be desirable to over-sample certain demographics during the random sampling stage of recruitment to help achieve representativeness.	
Inclusiveness: Inclusion should be achieved by considering how to involve under-represented groups. Participation should also be encouraged and supported through remuneration, expenses, and/or providing or paying for childcare and eldercare.	
Information: Participants should have access to a wide range of accurate, relevant, and accessible evidence and expertise. They should have the opportunity to hear from and question speakers that present to them, including experts and advocates chosen by the citizens themselves.	
Group deliberation: Participants should be able to find common ground to underpin their collective recommendations to the public authority. This entails careful and active listening, weighing and considering multiple perspectives, every participant having an opportunity to speak, a mix of formats that alternate between small group and plenary discussions and activities, and skilled facilitation.	
Time: Deliberation requires adequate time for participants to learn, weigh the evidence, and develop informed recommendations, due to the complexity of most policy problems. To achieve informed citizen recommendations, participants should meet for at least four full days in person, unless a shorter time frame can be justified. It is recommended to allow time for individual learning and reflection in between meetings.	
Integrity: The process should be run by an arm's length co-ordinating team different from the commissioning public authority. The final call regarding process decisions should be with the arm's length co-ordinators rather than the commissioning authorities. Depending on the context, there should be oversight by an advisory or monitoring board with representatives of different viewpoints.	
Privacy: There should be respect for participants' privacy to protect them from undesired media attention and harassment, as well as to preserve participants' independence, ensuring they are not bribed or lobbied by interest groups or activists. Small group discussions should be private. The identity of participants may be publicised when the process has ended, at the participants' consent. All personal data of participants should be treated in compliance with international good practices, such as the European Union's General Data Protection Regulation (GDPR).	

Figure 2 – IPART Principles for Good Practice Customer Engagement

IPART Principles	Checklist
Meaningful and sincere engagement: Customer engagement aims to understand customer needs and preferences, so a business can incorporate this into its plans and proposals.	
Diverse and inclusive engagement that is accessible and tailored to the customer base: Within a business's customer base, there will be a mix of different customers with varying preferences on how they prefer to receive information and be engaged.	
Balance customer, community and environmental needs: Water is critical to our communities, environment and economy. We expect businesses to demonstrate how they have considered and balanced their customers' and communities' diverse views and preferences in developing their plans and proposals.	
Relevant, timely and appropriate: Customer engagement should identify customer values, issues of priority and agreements on how the business would deliver on these expectations. We expect topics covered during customer engagement to be priorities for customers, and for a business to be able to demonstrate both: how it identified topics relevant to its customers; and how customers have had the chance to influence these topics.	
Transparent and accountable: We expect businesses to demonstrate how they ensure customers understand the overall impact of their preferences and willingness to pay. This should include how decisions will impact different customer and community groups and the impact for current and future customers.	
Representative, reliable, and valid design: Credible results from customer engagement require customer engagement to be designed so that it produces results that are an accurate representation of the views and preferences of the business's whole customer base	

Contents	Page

1.0 Engagement process

1.0 Engagement process

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, ability, cultural backgrounds, and other demographics.

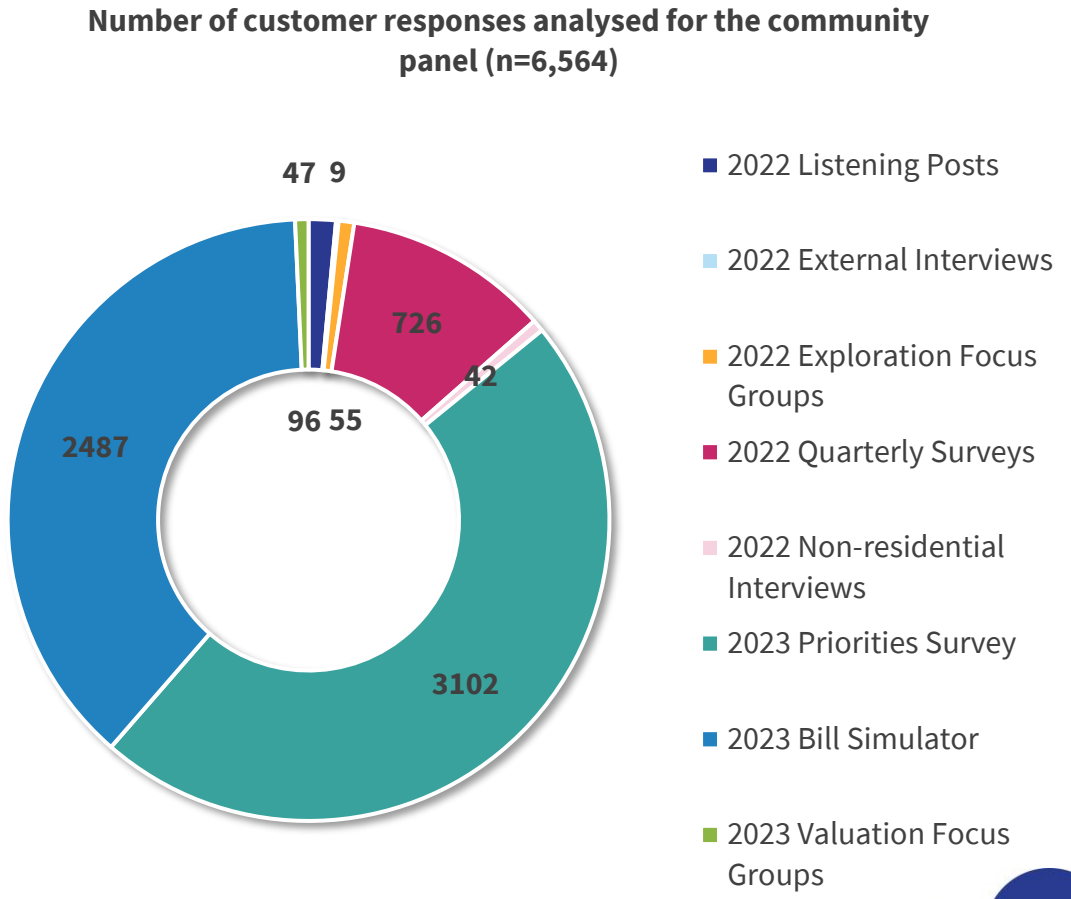
Findings from broader engagement supported and informed the deliberations of the community panel (see Appendix D for the full Engagement Report). The broader engagement took over a year, and focused on understanding customers' interests, concerns and priorities. It included listening posts, in-depth interviews, quarterly community surveys, a bill simulation and prioritisation survey, as well as focus groups with a broad sample of customers from across the Lower Hunter service area.

Particular attention and prominence was given to the voices of those experiencing financial vulnerability.

The material in the Engagement Report was supplemented by additional customer research and engagement findings, as well as projects from Hunter Water's daily operations (e.g. findings from the development of the Lower Hunter Water Security Plan, collaborative research with the Water Services Association of Australia, and inputs to Hunter Water's 2021-22 Operating Licence review).

In total, more than 6,500 customer responses from the broader engagement were analysed for the panel to consider.

Chart 1 – Number of customer responses analysed for the community panel



1.1 Timeline

Hunter Water heard from 6,564 customers about their interests, concerns and priorities between July 2022 and June 2023.

Any type of customer research has potential drawbacks, so the program had many different approaches to increase confidence that Hunter Water were fairly representing the views of its customers. A summary of the detailed timeline has been provided at right.

Figure 3 – 2025-2030 pricing proposal customer engagement program

1.2 Recruitment

Independent recruiter, Deliberately Engaging, managed the recruitment process for the community panel via a random, stratified selection process. This ensured the panellists were selected independently of both Hunter Water and Insync.

An expressions of interest (EOI) period began in September 2023. Customers were invited to register their interest to participate by filling out an online expression of interest form. Some exclusions applied, including: anyone under the age of 18, Hunter Water employees, contractors or Board directors from the last five years, and elected officials.

In total, 12,000 postal addresses were randomly selected from the Hunter Water customer base to receive the EOI. An additional 5,000 email addresses were also randomly selected. The geographic areas covered Cessnock, Dungog, Lake Macquarie, Maitland, Newcastle and Port Stephens.

A total of 91 expressions of interest were received. A sample was selected from this pool to form a final panel of 44 people that broadly represented the Hunter Water customer base in terms of age, gender, geography, and residential/non-residential customers. A demographic breakdown of the panel has been provided in Figure 4 (see overleaf).

Figure 3 shows there was no representation from people under the age of 29 on the community panel. Hunter Water put extra effort into promoting the expression of interest with this cohort, including by seeking recruitment support from the local TAFEs.

Despite these efforts, no customers under the age of 29 accepted the invitation to join the community panel. Special measures were taken to include the views of this cohort, including:

- Highlighting the views of younger customers in the research findings provided to the panel in the Engagement Report.
- Organising for two panel members to attend the Youth Perspectives Forum highlighting the results of the Hunter Insights Survey, conducted by the Institute of Regional Futures at the University of Newcastle. The two participants were asked to report back their key takeaways (as they related to the three topic areas) to the broader group on Day Four.
- Reminding the panel to discuss their draft recommendations with younger people in their network and seek their feedback.
- Organising a young representative from Rising Tide, a grassroots climate activist group, to attend the community panel as a guest contributor on Day Four for the carbon reduction topic.

Although 44 people were selected to participate in the panel, some natural attrition did occur. It is normal for participants to drop out before the first session and occasionally in between sessions. Reasons for dropping out can vary. Participants may drop out due to changes in availability, personal health, the process not meeting their expectations or family commitments. We know that most of the attrition for this panel was due to illness and changes to participant availability.

Overall, 39 participants attended the Orientation event (see Appendix B for demographic breakdown), 35 participants attended Day One, 28 participants attended Day Two, 30 participants attended Day Three, 25 participants attended Day Four, and 28 participants attended Day Five.

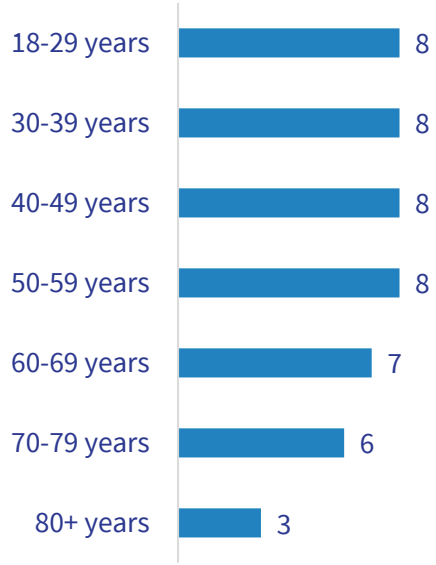
For a deliberation of this length, we would typically expect to see an attrition rate of somewhere between 20-30%. The attrition rate for Hunter Water was slightly above 30%, which could have been due to the extended break between Day 1 and Day 2, and/or the potential for panel members' personal circumstances to change across a five-month engagement period.

Figure 4 – Demographic breakdown of panel members who attended all sessions

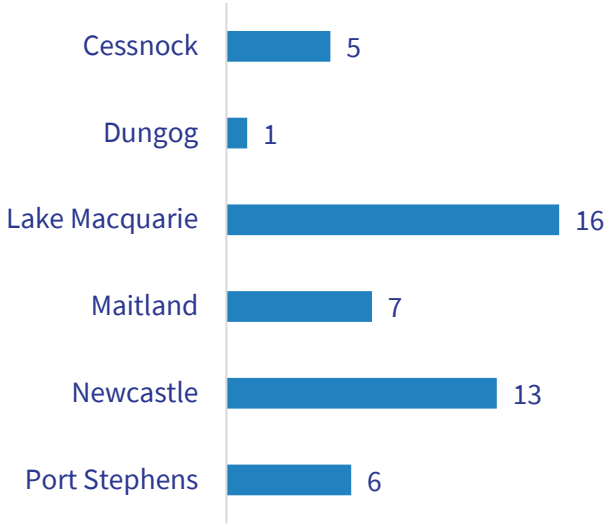
Target

Participants	48	
What is your gender?	Female – 24	Male – 24
Are you a residential or non-residential customer?	Residential – 46	Non-residential – 2
Do you own or rent your home?	Own/paying mortgage – 33	Rent – 15
Aboriginal and/or Torres Strait Islander	Yes – 3	No – 45
Concession card holder	Yes – 19	No – 29
Culturally and linguistically diverse	Yes – 3	No – 45

Age group:



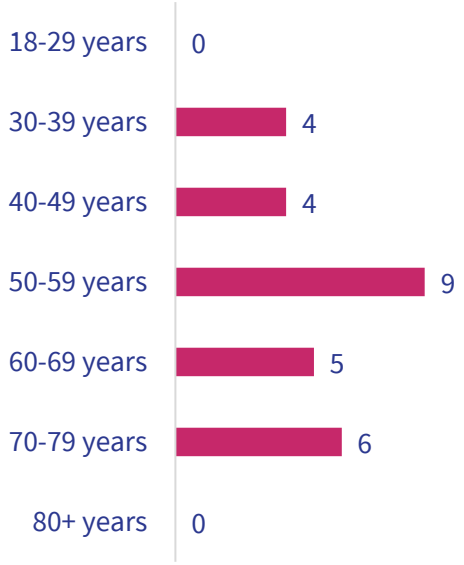
Region:



Attended all sessions

Participants	28	
What is your gender?	Female – 13	Male – 15
Are you a residential or non-residential customer?	Residential – 27	Non-residential – 1
Do you own or rent your home?	Own/paying mortgage – 27	Rent – 1
Aboriginal and/or Torres Strait Islander	Yes – 3	No – 25
Concession card holder	Yes – 10	No – 18
Culturally and linguistically diverse	Yes – 4	No – 24

Age group:



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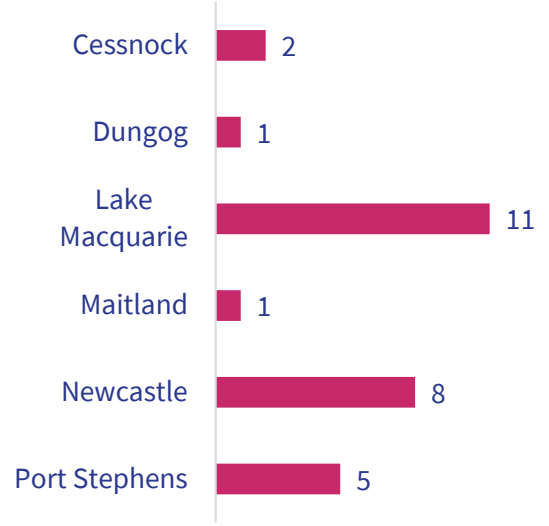


1.3 Universal and inclusive engagement

Hunter Water and Insync worked together to ensure that all voices could be heard at the community panel. In particular, that the views of small groups with different views were not obscured by the population averages.

Before the panel began, Hunter Water emphasised that support was available to enable customers to participate in the six sessions. The corporation offered a range of ways to support members, including travel reimbursements for customers who had to travel long distances for the in-person sessions, supplying devices for customers to join the online sessions, and providing or paying for childcare. Hunter Water also ensured that all venues were fully accessible and encouraged customers to identify other needs to enable them to participate.

One participant took up the offer of the travel reimbursement and another member borrowed an iPad with a working webcam and microphone. One other participant required parking close to the venue and this was organised for all four in-person sessions. Hunter Water also provided all members with a gift bag at the first session which included items to make them feel welcome and to help them participate (see Figure 5 below, and Appendix C for Guidebook).

Figure 5 – Gift bag and reading materials

Before the first meeting, participants were given written guidance on the basic requirements for using Zoom. Participants who felt less comfortable with the technology were encouraged to join a technology support session facilitated by Insync. Two sessions were held in the lead up to the first in-person meeting, and another two sessions were held before the first online meeting.

During the sessions, participants were shown how to successfully join a Zoom meeting, how to mute and unmute, how to use the chat, and how to use the reactions feature.

At the second meeting, participants were informed that Insync would be using an online brainstorm and collaboration tool called GroupMap. To reduce barriers to participation during the online sessions, Insync set up a practice activity on GroupMap which panel members could access via their mobile devices. Trialling GroupMap at the in-person sessions allowed Insync to provide extra support to members who may have struggled to use GroupMap on their own devices at the online sessions.

Gender was also considered in the program design, including planning for the smaller group activities to have all voices represented. This was particularly important for days three, four and five, when the participants were asked to develop their recommendations in small groups.

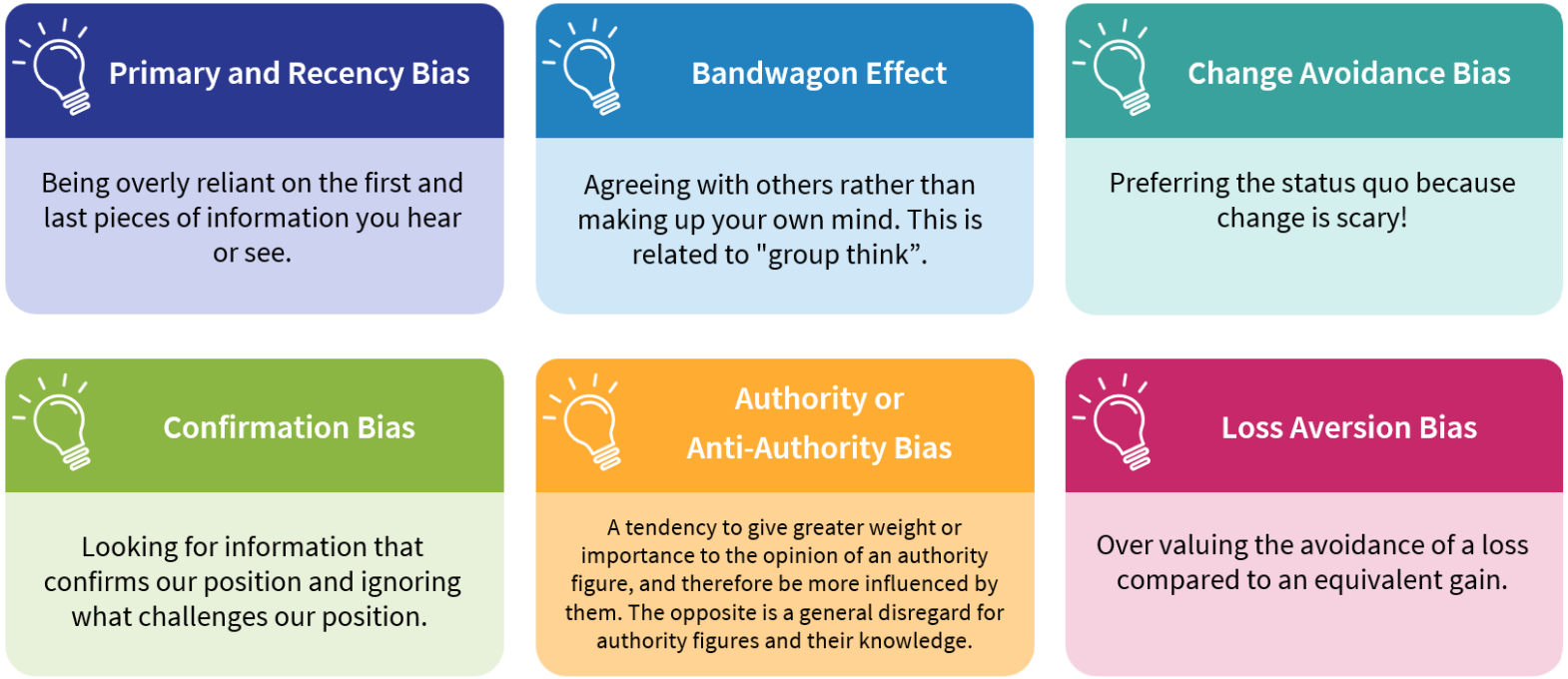
Throughout the engagement the needs of customers experiencing financial vulnerability were also considered. These customers and their advocates were sought out for their views, and their perspectives were highlighted to panel members in the Engagement Report. The topic of hot spots also concerned the possibility of decreasing bills, which alleviates rather than increases pressure on vulnerable customers.

1.4 Addressing bias

The participants were introduced to different types of cognitive bias and critical thinking techniques to help them to recognise bias and to think logically. In the introduction of the Engagement Report, Insync included an explanation of cognitive bias and framing bias.

This was expanded on at the Orientation event, when the lead facilitator explained the six types of cognitive bias shown in Figure 6 at right.

Figure 6 – Six types of cognitive bias



1.4 Addressing bias

At the Orientation event, the lead facilitator also spent time explaining the six different questioning frames to participants. Participants were then put into small groups to develop their own questions to guide their critical thinking (see the results in Figure 7 at right).

The participants were continually reminded of the different types of cognitive bias at play, as well as their critical thinking techniques. At the first meeting, participants engaged in an interactive activity to illustrate how cognitive bias can influence their decision-making.

Throughout the subsequent days of the deliberation, Insync used the six-question framework to emphasise the importance of cognitive bias and critical thinking. Participants were also regularly asked to reflect and share their observations of how the group had been applying their critical thinking techniques.

Figure 7 – Questioning frames developed by the community panel

2.0 Overview of proceedings

2.1 Session overview

The community panel comprised six sessions, including four in-person sessions and two online meetings via Zoom. The panel focused on developing a set of recommendations related to the following three topics:

1. **Hot spots:** Our challenge of providing reliable, high-quality services,
2. **Water conservation**: Our challenge of providing reliable services by making sure there is enough water for today and tomorrow, and
3. **Carbon reduction**: Our challenge of protecting the environment.

Figure 8 (at right) outlines the overview and purpose of each session. Figure 9 (overleaf) provides a more detailed summary of the proceedings for each session.

Figure 8 – Session overview and purpose

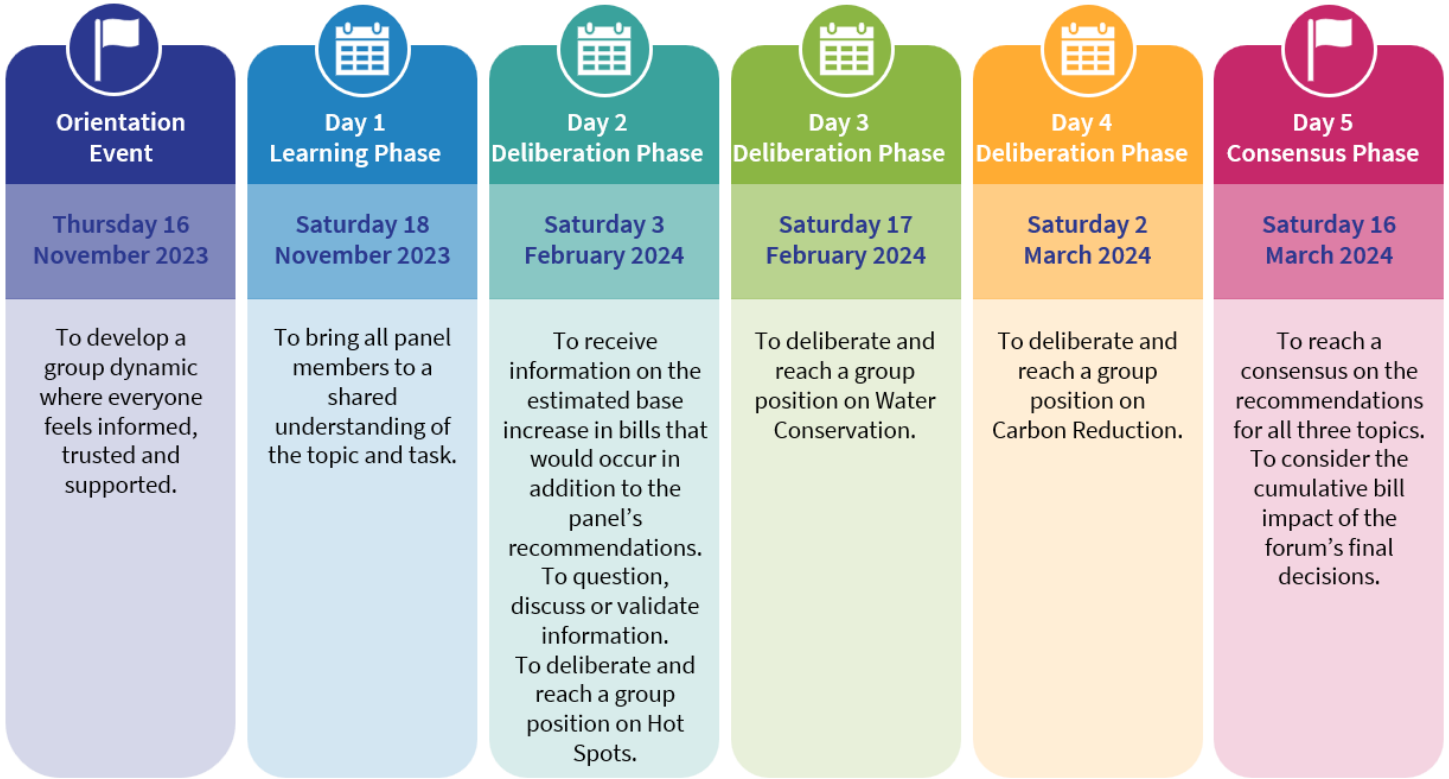


Figure 9 – Overview of community panel proceedings

2.1 Session overview

Baseline bill impact

Hunter Water went to significant effort to be transparent with the community panel about the unavoidable bill increases the corporation was faced with. These increases were outside the scope of the panel's deliberations. In the case of the supply augmentation expenditure, the expenditure had already been subject to public scrutiny during the development of the Lower Hunter Water Security Plan.

The baseline bill increases were described in the Engagement Report, in the bill simulator, in person by the Managing Director, and even in physical form with the "building blocks" pictured at right.

After explaining the increases and answering questions, a range of emoji type posters were placed around the room and participants were asked to stand near the poster that represented how they felt. They explained their feelings to the rest of the panel and Hunter Water. Time was provided for people to talk through their positions. Some felt comforted to know that measures were being taken to assure the long term viability of supply. Others felt frustrated that the panel was deliberating over such a small proportion of the bill.

Hunter Water responded by pointing out that although the "room to move" on the bill was relatively small, the total expenditure the panel was providing recommendations on was actually quite large.

Participants were expressly asked whether they felt ready to move on to the discussion about the three key topic areas. Private discussions with the Senior Economist, Chief Financial Officer and/or Managing Director were offered to anyone who harboured residual misgivings. One participant took up the opportunity and later returned to the deliberation.

2.2 Roles and responsibilities

The following table outlines the main groups involved in Hunter Water's community panel process.

Table 1 – Community panel roles and responsibilities

Group	Responsibilities
Panel members (randomly selected community members)	To work together to develop recommendations to be incorporated into Hunter Water's 2025-2030 pricing proposal to the maximum extent possible.
Hunter Water (host organisation)	To support the process, prepare the Guidebook, provide expertise and knowledge as requested by the panel, observe the process, answer specific questions directed to them, and respond to the panel's final recommendations.
Insync facilitators (independent facilitators and research consultants)	To provide a supportive, inclusive and productive space that enables panellists to deliberate, respond to their challenge and make recommendations within the time available.
Deliberately Engaging (independent recruiters)	To manage the recruitment process (including random selection and stratification) and ensure it is fair and unbiased.
Guest contributors (content experts)	To provide expert knowledge into the process and answer questions from the panellists.
Observers (stakeholders and representatives of the host organisation)	To observe the deliberation and increase transparency of the process.

2.3 Guest contributors

The following contributors were nominated by Hunter Water to introduce the key topics at Day One of the community panel.

Table 2 – Guest contributors for Day One

Guest contributor	Role and organisation	Topic
Douglas McCloskey	Program Director, Energy and Water Consumers' Advocacy Program at the Public Interest Advocacy Centre (PIAC)	How to get the most out of a deliberative forum
Glen Robinson	A/Executive Manager, Customer Delivery at Hunter Water	Hot spots
David Derkenne	Group Manager, Sustainability and Waterways at Hunter Water	Using recycled wastewater or stormwater for community greening
Colin Hancock	Group Manager, Water Resilience at Hunter Water	Reducing leaks from the Hunter Water system
Julia Irwin	Program Lead, Water Conservation at Hunter Water	Encouraging customers to use less water and reduce their leaks
Tony McClymont	Program Lead, Recycled Water and Integrated Water Management at Hunter Water	Using recycled wastewater or stormwater for industry
James Willing	Team Leader, Sustainability and Climate Change at Hunter Water	Carbon reduction
Emma Turner	Senior Economist at Hunter Water	Understanding prices and charges
James Garriock	Executive Director at Insync	Engagement methodology

2.3 Guest contributors

The following contributors presented on the baseline bill impact and participated in a Q&A session with panel members.

Table 3 – Guest contributors for Day Two (baseline bill impact)

Guest contributor	Role and organisation
Greg Martin	Chair of the Hunter Water Board of Directors
Darren Cleary	Managing Director at Hunter Water
Jennifer Hayes	Executive Manager, Finance and Business Performance at Hunter Water

In addition, the following contributors were nominated by panel members and Hunter Water to close the information gaps on hot spots.

Table 4 – Guest contributors for Day Two (hot spots)

Guest contributor	Role and organisation	Information gap to fill
Glen Robinson	A/Executive Manager, Customer Delivery at Hunter Water	To understand how many people are affected by each hot spot, how much each hot spot will cost to fix, if we're talking about long-term or short-term solutions.
Robert Main	Group Manager, Planning and Engineering at Hunter Water	
Jarod Wynn	A/Group Manager, Asset Solutions at Hunter Water	To explain hot spots from an operational perspective. To hear from someone with experience out in the field. To share qualitative anecdotes, rather than facts and figures.
Jennifer Maverick	Senior Catchment Engineer at Hunter Water	
Christine	Hunter Water customer who has experienced low water pressure (pre-recorded video)	To hear from someone who is affected by this issue. What kind of interactions have they had with Hunter Water? How does it impact their daily life and finances?
Robert and Chris	Hunter Water customer who has experienced wet weather wastewater overflows (pre-recorded video)	

2.3 Guest contributors

The following contributors were nominated by panel members and Hunter Water to close the information gaps on water conservation.

Table 5 – Guest contributors for Day Three (water conservation)

Guest contributor	Role and organisation	Information gap to fill
David Derkenne	Group Manager, Sustainability and Waterways at Hunter Water	To hear from someone with experience out in the field. To share qualitative anecdotes, rather than facts and figures. To hear from a water engineer, as well as someone who can explain the benefits vs costs of water conservation.
Tony McClymont	Program Lead, Recycled Water and Integrated Water Management at Hunter Water	
Julia Irwin	Program Lead, Water Conservation at Hunter Water	
Robert Main	Group Manager, Planning and Engineering at Hunter Water	
Erin Cini	Director Strategy and Partnerships at Water Services Association of Australia	What do other corporations – like Central Coast – do compared to Hunter Water? What is best practice around the world?
Jason Mingo	Liveable Communities Manager at Water Services Association of Australia	
Nigel Waters	Committee Member from the Port Stephens EcoNetwork	What are people doing in their own community about water conservation? What would it look like if we all contributed to these types of initiatives?

2.3 Guest contributors

The following contributors were nominated by panel members and Hunter Water to close the information gaps on carbon reduction.

Table 6 – Guest contributors for Day Four (carbon reduction)

Guest contributor	Role and organisation	Information gap to fill
David Derkenne	Group Manager, Sustainability and Waterways at Hunter Water	To explain the types of things that Hunter Water could do and what it would cost. What is the benefit to the end-user if Hunter Water does more than they legally have to do?
James Willing	Team Leader, Sustainability and Climate Change at Hunter Water	
Erin Cini	Director Strategy and Partnerships at Water Services Association of Australia	To explain the various options and the costs behind those different options. What options are available to Hunter Water? What has been done already by other water utilities?
Jason Mingo	Liveable Communities Manager at Water Services Association of Australia	
Devni Edirisinghe	Representative from Rising Tide	What are you hearing from younger people in the region about this topic? What should we be mindful of when making decisions on this topic?

2.4 Data inputs

The panel were provided with a wide variety of data inputs to assist their deliberations. A description of each input has been listed in Table 6 below. 7

Table 7 – Data inputs provided to the community panel

Data input	Description
Guidebook	A document sent to each panel member outlining the panel process, expectations, as well as session times and logistics. A copy of the Guidebook has been included in the Appendices.
Engagement Report	Prepared by Hunter Water and Insync to provide a deeper understanding of customer interests, concerns and priorities, as well as Hunter Water's approach to water and sewerage services. A copy of the Engagement Report has been included in the Appendices.
Bill impact look-up table	The bill impact look-up table was designed to help panellists understand, for a range of revenue requirements, the impact on an average bill for different types of customers. A copy of the bill impact look-up table has been included in the Appendices.
Guest contributors	Several subject matter experts were organised by Hunter Water to share different ideas and perspectives about water and sewerage services. There were contributors nominated by panel members, as well as contributors nominated by Hunter Water. A copy of the guest contributor bios that were sent to panel members has been included in the Appendices.
Other resources	The panel asked 116 questions of Hunter Water across all six sessions. All questions were responded to and emailed to panel members afterwards. A copy of the questions and answers has been included in the Appendices.

3.0 Panel recommendations

3.0 Panel recommendations

Process for drafting and revising the recommendations

The panel followed the same process to develop the recommendations for hot spots, water conservation and carbon reduction (see Figure 10). This process allowed the panel to work on each version of the recommendation multiple times before they were asked to vote on the final recommendation statement.

After closing their information gaps through activities with various guest contributors, the participants were divided into groups based on the relevant topic questions. Each group were the 'topic champions' for their allocated topic question.

In their groups, participants first brainstormed a response to their question, then drafted the recommendation, then received feedback from other panel members, and then used that feedback to revise the recommendation and to 'pitch' their draft recommendation to Hunter Water.

Following this, several subject matter experts from Hunter Water were invited to provide an immediate response to the draft recommendations. These experts were specifically instructed to refrain from offering opinions or introducing new information, but to instead focus on seeking clarification by asking questions.

In between sessions, the Hunter Water subject matter experts provided additional written feedback on the draft recommendations. This feedback was used by the panel to further revise the recommendation at the next session. This is step five and is explained further on the next page.

Figure 10 – Drafting and revising the recommendation

3.0 Panel recommendations

Process for reconnecting and refining the recommendations

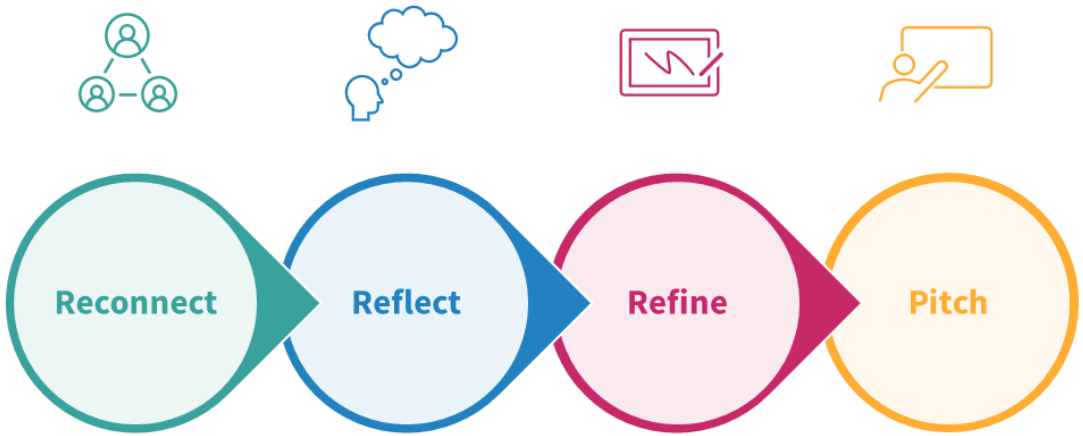
To refine the recommendation, the participants were mixed up into new groups so they could work on different recommendations. The groups were also changed to avoid groupthink and to bring fresh eyes and new perspectives to the topics.

The participants were asked to consider and address the written feedback provided by Hunter Water. They were also asked to encourage input from any panel members who may have been apologies at the previous session, and to share any new youth perspectives they may have sought out in between sessions.

First, the participants were asked to reconnect with their new question and draft recommendation and reflect on Hunter Water's feedback. Next, the participants were allocated into new 'topic champion' groups and were tasked with making further refinements to the recommendation. Lastly, the 'topic champions' were asked to 'pitch' their refined recommendation to the full group.

This process is outlined in Figure 11.

Figure 11 – Reconnecting and refining the recommendation



3.0 Panel recommendations

Process for finalising the recommendations

On Day Five, the panel was tasked with finalising their recommendations. To do this, they were asked to consider additional feedback from Hunter Water and the results of a 'Recommendations Survey' – a survey the panel was invited to complete between Day Four and Day Five and designed to assess early levels of support for each recommendation. The outcomes of the survey supported the panel, and the facilitation team, to understand where they needed to focus their time and energy as the panel worked to revise their recommendations for the final time.

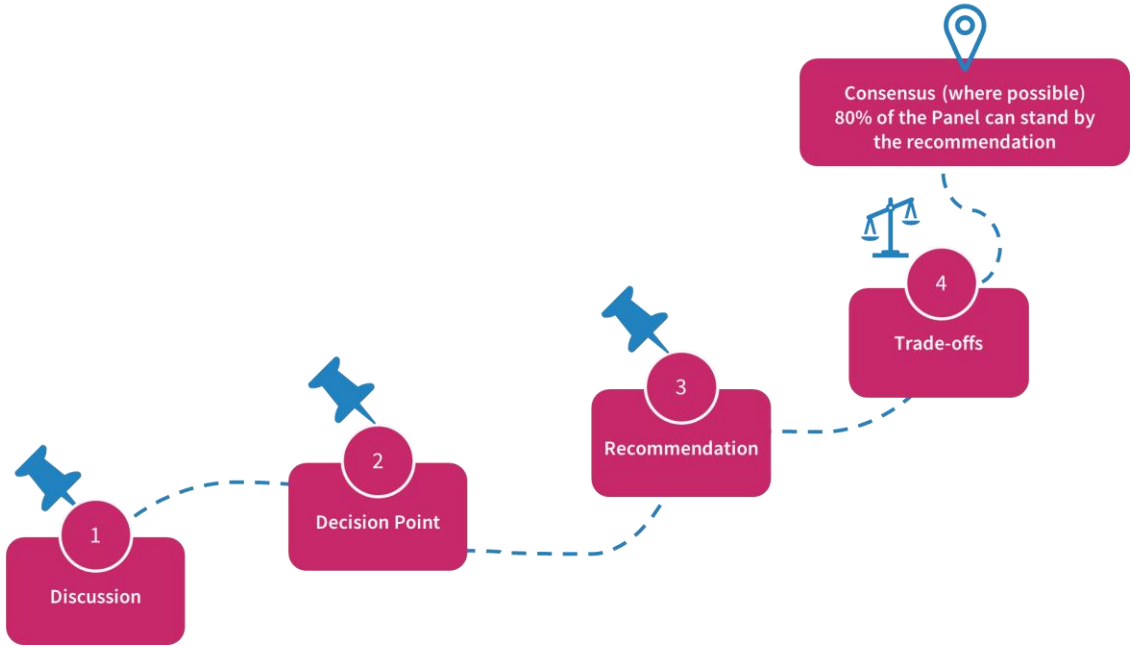
The panel was divided into three groups, each assigned to a specific topic, with the objective of enhancing the clarity of the recommendations and ensuring consistency across the various topic questions.

To assist with finalising the recommendations for the level of investment for each topic, Hunter Water provided a response as to what they could deliver within the agreed revenue requirement range. Working in the same small groups, the participants were asked to consider the information presented by Hunter Water, discuss the options, and reach a decision on their preferred options.

During this process, the panel was asked to reflect on what they were willing to trade-off to ensure their preferences fit within the agreed revenue requirement range. The panel was again reminded that any extra investment would be in addition to the base bill increase.

This process is summarised in Figure 12. The final process of the 'Walk Through' is presented on the next page.

Figure 12 – Drafting and revising the recommendation



3.0 Panel recommendations

Process for completing the final 'Walk Through'

The 'Walk Through' process involves the entire panel and serves as the final stage to assess the level of support for each recommendation. The criterion for support is that at least 80% of the panel can stand by a recommendation. If fewer than 80% can stand by a recommendation, then that recommendation is not considered to hold enough panel support. In such cases, a group discussion ensues to explore differing viewpoints and to determine if any final adjustments can be made to increase support. If the recommendation still does not meet the 80% criteria, it is omitted from being handed over to Hunter Water.

The 'Walk Through' of the 13 recommendations occurred in two parts.

Part one involved panel members individually considering their level of support for each of the 13 recommendations. Using sticky dots, the participants were asked to place their dot on the position that best represented their level of support for each recommendation (see Figure 13 for rating scale). The results of this activity determined the process for part two of the 'Walk Through'.

During part two, each of the 13 recommendations were discussed in the full group. Even where the 80% criteria was met, there was still a discussion to understand the position of those who could not stand by a recommendation. The primary focus of the discussion was to consider the recommendations where less than 80% of the group could stand by a recommendation. There was only one recommendation that did not reach the 80% criteria. A detailed description of the process undertaken to address this recommendation has been provided in Section 3.3.

The following pages present the panel's final recommendations and the results of the 'Walk Through' process.

Figure 13 – Rating scale to assess the recommendations

HOT SPOTS FINAL RECOMMENDATIONS

Q1

HOW IMPORTANT IS THE ISSUE? WHY?

EQUALITY OF CARE/ SERVICE FOR ALL CUSTOMERS

Q2

HOW DO WE PRIORITISE? CHEAPEST OR WORST?

HELP CUSTOMERS IN PRIORITY ORDER

P1 - WET WEATHER WASTE WATER OVERFLOWS, FOLLOWED BY REMAINING P1 ISSUES

P2&3 - CONSIDERED IN ORDER OF PRIORITY WITH MOST IMPACT FOR LOWEST COST

* REFINE PRIORITY CRITERIA TO INCLUDE LONGEVITY

Q3

WHAT DO WE DO WHEN COST to FIX = PROPERTY VALUE?

FIX THE PROBLEM

WHEN ALL ELSE FAILS, CONSIDER PURCHASE OF PROPERTY

NEVER SPEND OVER/ ABOVE THE VALUE OF THE PROPERTY TO FIX THE PROBLEM

Q4

WHAT SHOULD HW KEEP IN MIND?

MAKE INFO PUBLICLY AVAILABLE

✓ DE-IDENTIFIED

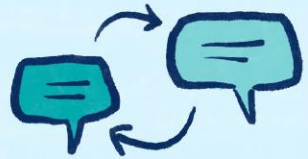
REBATE WHERE UNRESOLVED

IF UNSATISFACTORY MAY OFFER TO PURCHASE PROPERTY

* COMPENSATE IF NOT FIXED by 2030, WITH LEVEL OF COMPENSATION LINKED TO PRIORITY

FUTURE-PROOF NEW DEVELOPMENTS

* STRENGTHEN DEVELOPER ASSET PROCESSES (FOCUS ON PRIORITY 1s)



STRENGTHEN & ENHANCE

FEEDBACK TO CONVEYERS & PROSPECTIVE PURCHASERS

* IT'S A COMPLEX ISSUE
  - COULD DEVALUE HOUSES
  - CURRENT OWNER MAY BE UNAWARE
  - PRIVACY CONSIDERATIONS

HUNTER WATER COMMUNITY PANEL - 16.03.24

= HW RESPONSES

3.1 Hot Spots
Topic Question #1

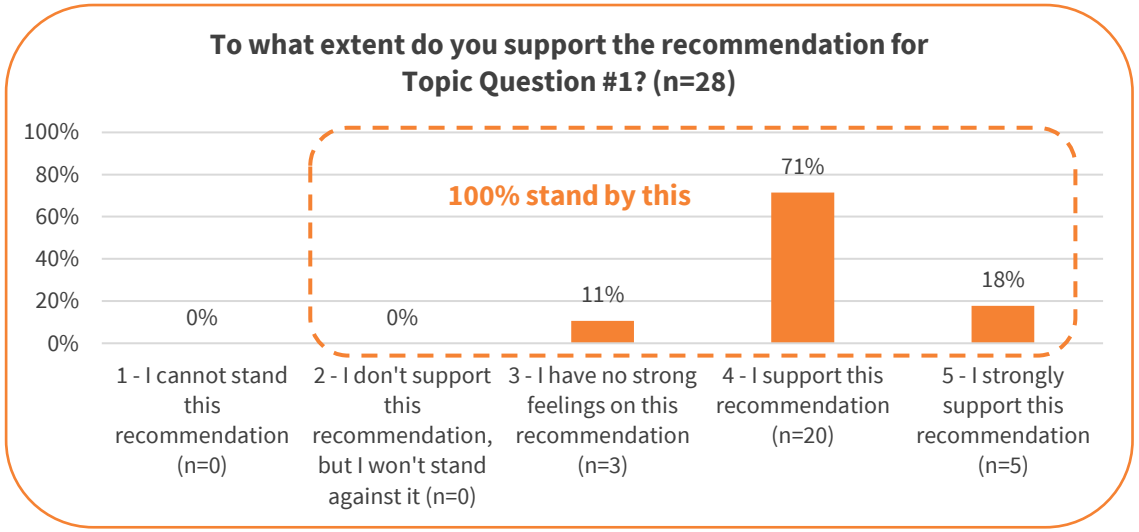
The panel provided the following recommendation to Hunter Water in response to Topic Question #1.

How important is the issue of hot spots, and why? *#1*

> ***The issue of hot spots is very important for Hunter Water as a good corporate citizen and should be managed and prioritised according to medical and physical impacts and cost effectiveness.***
>
> ***It is Hunter Water's moral duty of care to provide equality of care/service for all equal paying customers.***

The panel was then asked to vote on the level of support for the recommendation. Overall, 100% of panel members stood by the recommendation for Topic Question #1.

Chart 2 – Hot spots: Support for Topic Question #1 recommendation



3.1 Hot Spots
Topic Question #2

The panel provided the following recommendation to Hunter Water in response to Topic Question #2.

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?

#2

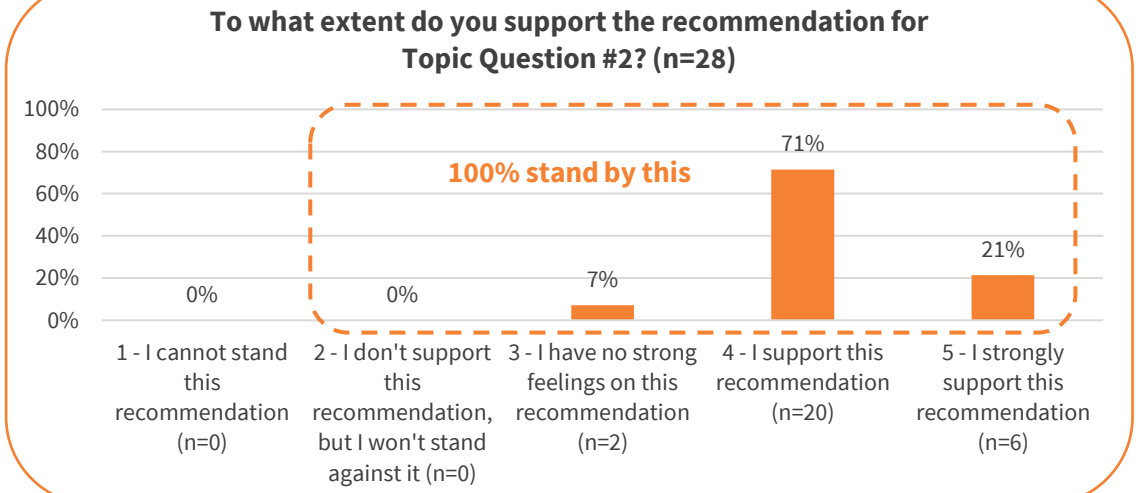
Hunter Water needs to consider prioritisation and rectification with a focus on priority over number of customers. P1 wastewater overflow issues should be considered first, followed by remaining P1 issues across water pressure and odours.

P2 and P3 customers across all areas should be considered in order of priority. There has to be an overlay to consider rectifications in areas with the most impact for the lowest cost.

Example of allocation of funds:

- ***P1 wet weather wastewater overflow – 50%***
- ***Remaining P1 – 25%***
- ***P2 – 15%***
- ***P3 – 10%***

Chart 3 – Hot spots: Support for Topic Question #2 recommendation



The panel was then asked to vote on the level of support for the recommendation. Overall, 100% of panel members stood by the recommendation for Topic Question #2.

3.1 Hot Spots
Topic Question #3

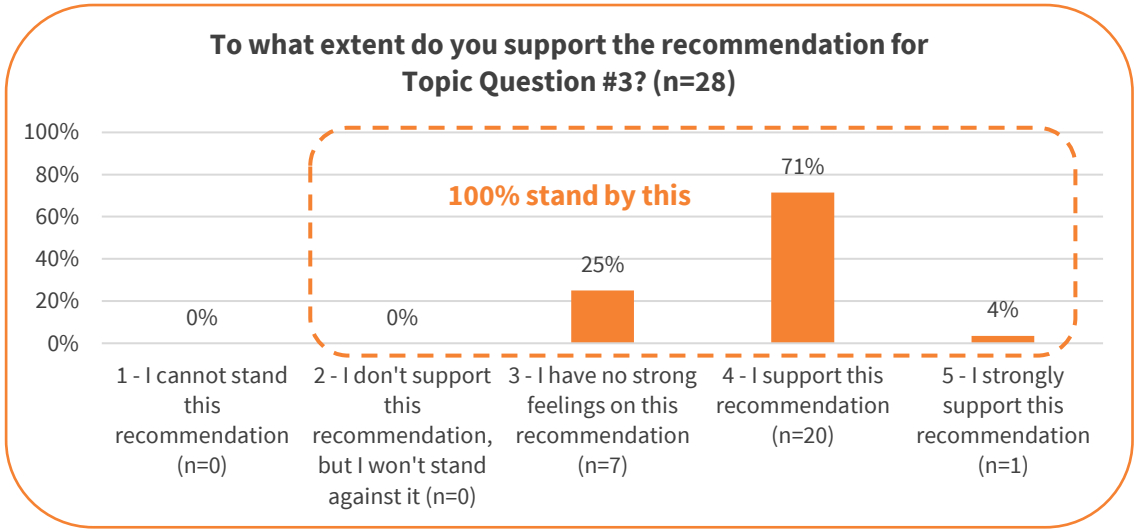
The panel provided the following recommendation to Hunter Water in response to Topic Question #3.

What should we do where it costs about as much to fix a hot spot as the affected property is worth? *#3*

> ***1. Fix or mitigate the problem.***
>
> ***2. Never spend over/above the value of the property to fix the problem.***
>
> ***3. When all else fails, consider (over time) purchase of the property:***
>
> - ***When Hunter Water has exhausted all reasonable options.***
> - ***Done with a panel of experts and public consultation.***

The panel was then asked to vote on the level of support for the recommendation. Overall, 100% of panel members stood by the recommendation for Topic Question #3.

Chart 4 – Hot spots: Support for Topic Question #3 recommendation



3.1 Hot Spots
Topic Question #4

The panel provided the following recommendation to Hunter Water in response to Topic Question #4.

What should Hunter Water keep in mind when addressing the issue of hot spots? *#4*

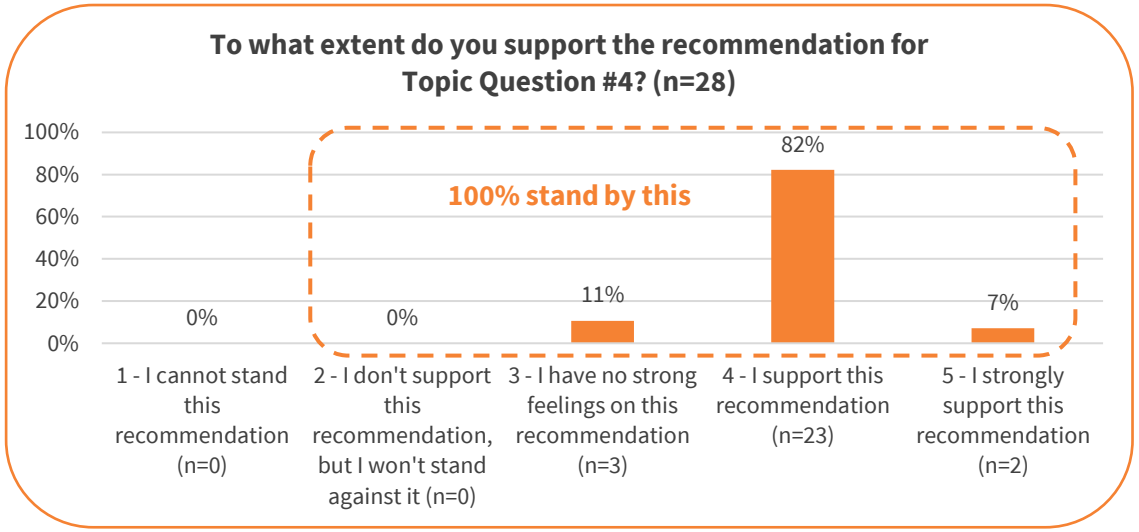
1. Hunter Water (HW) should provide an annual report to hot-spot customers about the money invested and the steps that have been taken to resolve the issue. This report should also be posted online.

2. Where HW has not been able to adequately address the priority 1 hot-spot issues, within a reasonable timeframe, HW will provide reasonable compensation with regard to the severity and longevity of the problem. If this is not satisfactory HW may offer to purchase the property.

3. To the extent that Hunter Water has the ability to influence they should be future proofing new developments. Information about hot spots should be publicly available. Hunter Water should strengthen and enhance feedback to conveyancers and prospective purchasers on significant hotspot issues that they may face, even if they are subjective issues.

4. Explore options for working with council, customers, etc to determine the cause of the issue and liability of other parties.

Chart 5 – Hot spots: Support for Topic Question #4 recommendation



The panel was then asked to vote on the level of support for the recommendation. Overall, 100% of panel members stood by the recommendation for Topic Question #4.

3.1 Hot Spots Topic Question #5

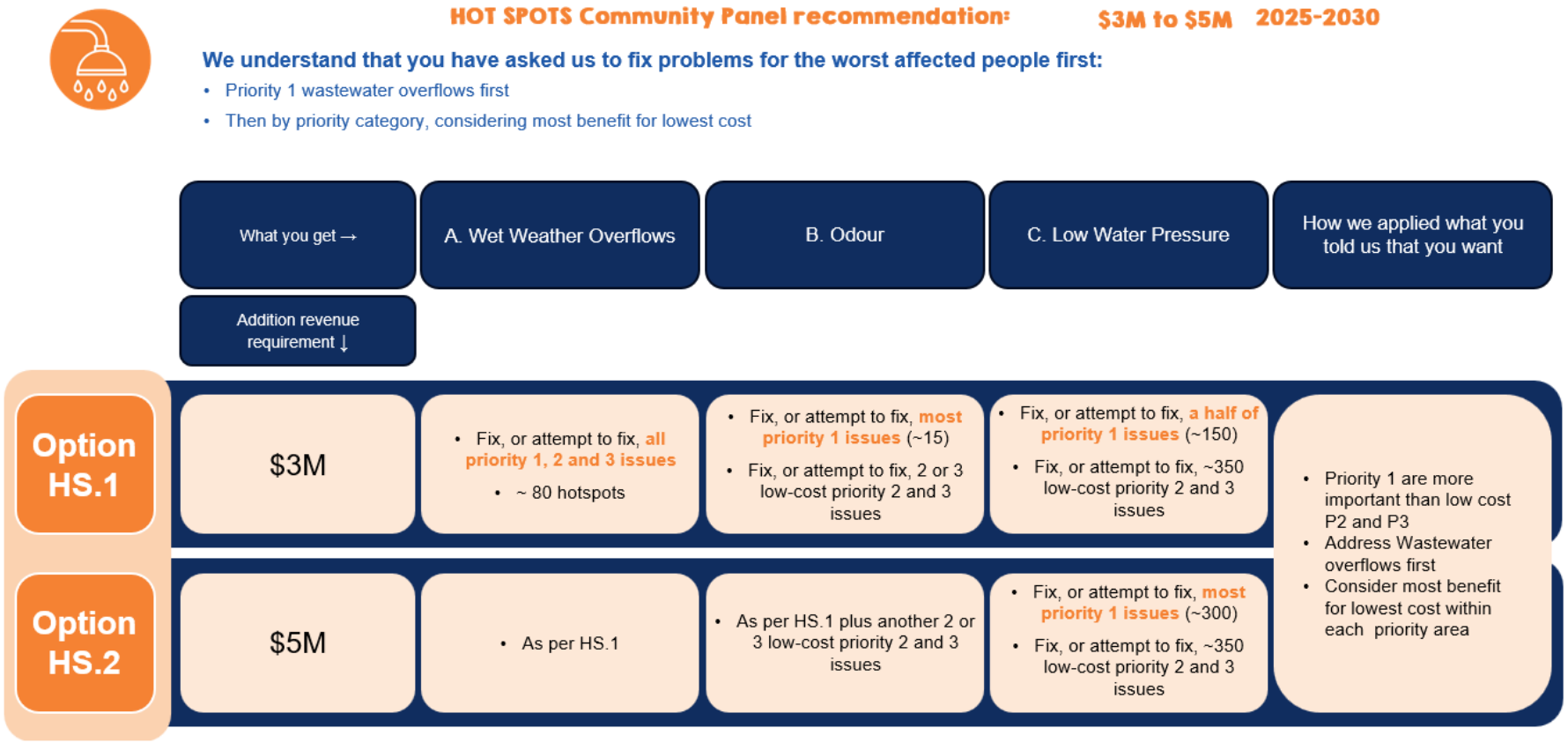
The fifth and final question that the panel were asked to respond to was: **Approximately how much should we invest in this issue?** (i.e. hot spots)

To assist the panel with making their decision on the appropriate level of investment for hot spots, Hunter Water provided a set of options to consider (see Figure 14, at right) that would fit within the proposed revenue requirement range of $3 million to $5 million.

The participants were told they could "mix and match" the actions within each option to create a new combination of additional revenue and service levels. Hunter Water also explained that any extra investment in hot spots would be in addition to the base bill increase.

The panel's final decision on the level of investment for hot spots is outlined on the next page.

Figure 14 – Cost options for hot spots



3.1 Hot Spots
Topic Question #5

After considering the various options for hot spots, the panel provided the following recommendation to Hunter Water:

#5

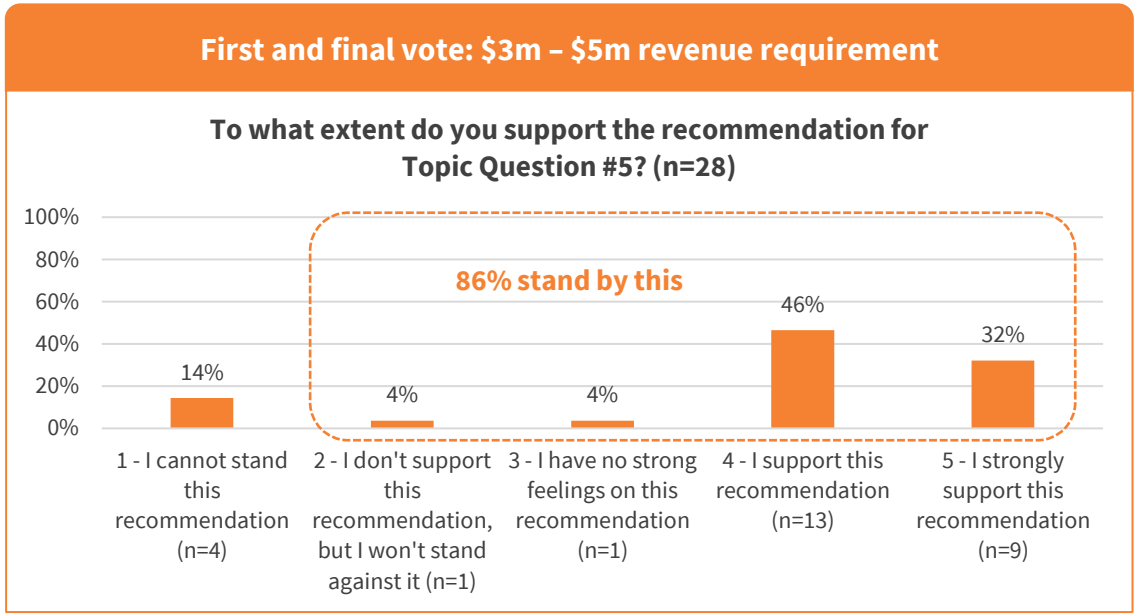
- ***A revenue requirement range of $3-$5 million.***
- ***Comprised of the following elements from Option HS.1:***
  - *Wet weather overflows – Fix, or attempt to fix, all priority 1, 2 and 3 issues (~ 80 hot spots).*
  - *Odour – Fix, or attempt to fix, most priority 1 issues (~15). Fix, or attempt to fix, 2 or 3 low-cost priority 2 and 3 issues.*
- ***And the following elements from Option HS.2:***
  - *Low water pressure – Fix, or attempt to fix, a half of priority 1 issues (~150). Fix, or attempt to fix, ~350 low-cost priority 2 and 3 issues.*

In addition, the panel provided the following justification for their recommendation:

- A. Wet Weather Overflows – Same regardless.
- B. Odour – Value for money.
- C. Low Water Pressure – More customers for $ when compared to B.

The panel was then asked to vote on the level of support for the recommendation. Overall, 86% of panel members stood by the recommendation for a revenue requirement range of $3-$5 million.

Chart 6 – Hot spots: Support for Topic Question #5 recommendation



The panel members who couldn't stand by this recommendation provided the following reasons:

- Couldn't understand how the options had been divided up to fit within the $3m-$5m range.
- Wasn't sure how much of the $56 base bill increase would cover these types of issues already.

Emma Turner explained that the group's preferences for hot spots would result in the revenue requirement range landing closer to $3-$4 million (rather than the original $3-$5 million). After hearing this, two participants said they would be more comfortable with the revised revenue requirement range.

WATER CONSERVATION FINAL RECOMMENDATIONS

Q1

WHEN IS IT APPROPRIATE TO PAY MORE TO SAVE WATER THAN WATER IS WORTH?

TO SECURE RESOURCES FOR FUTURE GENERATIONS

WHEN SUPPLY IS COMPROMISED

Q2 & 3

PREFERRED OPTION FOR CONSERVING DRINKING WATER?

SAVE WATER BY REDUCING LEAKS IN OUR SYSTEM

* RANGE OF INVESTMENT OPTIONS

* ASSIST & ENCOURAGE HOUSEHOLDS & BUSINESSES TO USE LESS WATER

Q4

SHOULD HOUSEHOLDS SUBSIDISE RECYCLED WATER TO MAKE IT ATTRACTIVE FOR INDUSTRIAL USERS?

HOUSEHOLDS SHOULD NOT BE EXPECTED TO PAY ADDITIONAL $$$ FOR INDUSTRIAL USES

* MAY INVEST IN RECYCLED WATER IF CHEAPEST WAY TO MEET REQUIREMENTS FOR OUR COMMUNITY

HUNTER WATER COMMUNITY PANEL - 16.03.24

= HW RESPONSES

3.2 Water Conservation Topic Question #1

The panel provided the following recommendation to Hunter Water in response to Topic Question #1.

Is it ever appropriate to pay more to save water than that water is worth? When, and with what conditions? **#1**

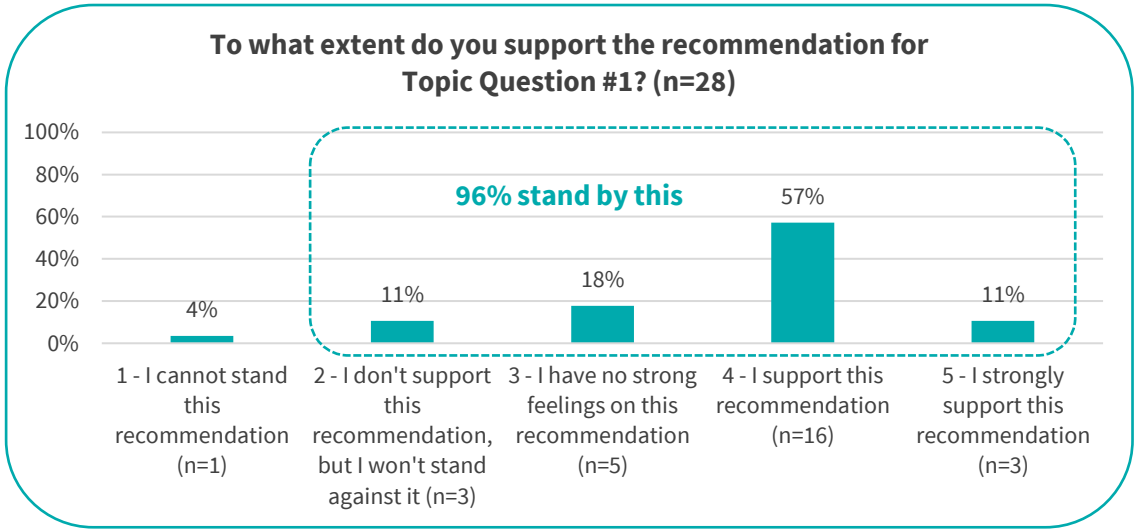
1. Yes, to secure resources for future generations.

- ***We need to continue water conservation programs now and continue to adapt for the future and emerging needs as required.***
- ***Long term forward planning 20 years plus.***
- ***Future proofing by continuing and adapting by planning, building new dams, recycling water plants, desalination and moving to best practise (balanced with costs/impacts).***

2. Yes, when our supply has been compromised (enviro or chemical issue or drought).

Water conservation is important to secure resources for future generations. We should consider paying more for water than it's worth through periods of prolonged drought or other environmental issues (e.g. supply is chemically compromised). During these times, we recommend Hunter Water increase community education for water conservation.

Chart 7 – Water conservation: Support for Topic Question #1 recommendation



The panel was then asked to vote on the level of support for the recommendation. Overall, 96% of panel members stood by the recommendation for Topic Question #1.

The panel member who couldn't stand by this recommendation provided the following reason:

- It isn't okay to pay more for water than what it is worth. If there was a shortfall, that would create a market need to change the cost of water.

3.2 Water Conservation Topic Questions #2 and #3

The panel provided the following recommendation to Hunter Water in response to Topic Questions #2 and #3.

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? *#2 & #3*

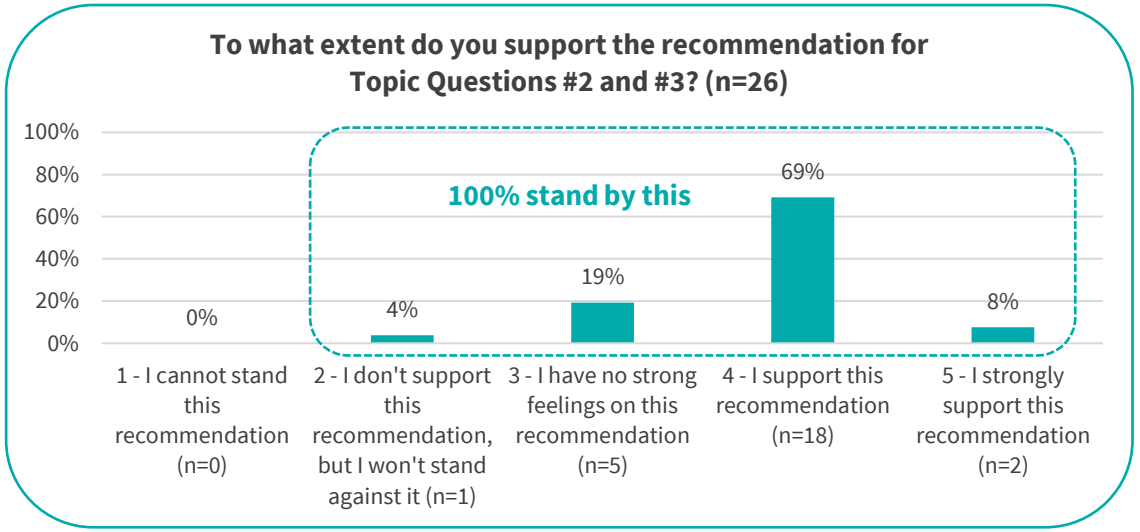
A. Hunter Water should encourage households to reduce their leaks/use less water. Handled correctly this should be a cost effective and easier way of reducing wastage. Worth of priority 2.

B. Hunter Water has more direct control over reducing leaks in their own system. This option has a high effect for a relatively low cost and should be prioritised first.

C. Increased usage of recycled water in industry should be considered as they are large users of water, however costs should not be distributed evenly across all customers and should be apportioned based on usage, size of business, and distance from treatment plant. This option is priority 3.

D. Increasing recycled water use for community greening, though important for health and wellbeing, should be considered as lower priority as it is costly, and the benefits are not distributed evenly across serviced areas. Lowest priority of the 4 options.

Chart 8 – Water conservation: Support for Topic Question #2 and #3 recommendation



The panel was then asked to vote on the level of support for the recommendation. Overall, 100% of panel members stood by the recommendation for Topic Questions #2 and #3.

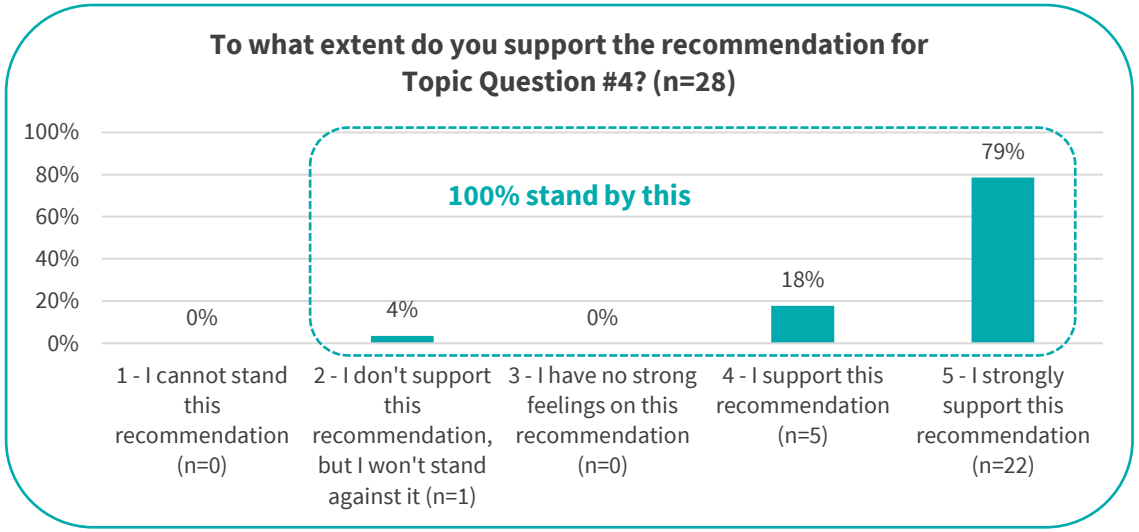
3.2 Water Conservation Topic Question #4

The panel provided the following recommendation to Hunter Water in response to Topic Question #4.

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)? **#4**

> ***Households should not be expected to pay additional costs for industrial users. The level of investment for recycled water should not be $0 but the funds should not come from household users. As households are not the users of these facilities they should not be required to pay.***
>
> ***It is suggested that industrial users should be required to at the time of development to install and operate a recycled water system in some way, shape or form, whether onsite or utilise external supplied recycled water.***
>
> ***Hunter water should provide advice and support on how and when recycled water can be used, and ongoing support with developments in these technologies, however not at the cost of household users.***

Chart 9 – Water conservation: Support for Topic Question #4 recommendation



The panel was then asked to vote on the level of support for the recommendation. Overall, 100% of panel members stood by the recommendation for Topic Question #4.

3.2 Water Conservation Topic Question #5

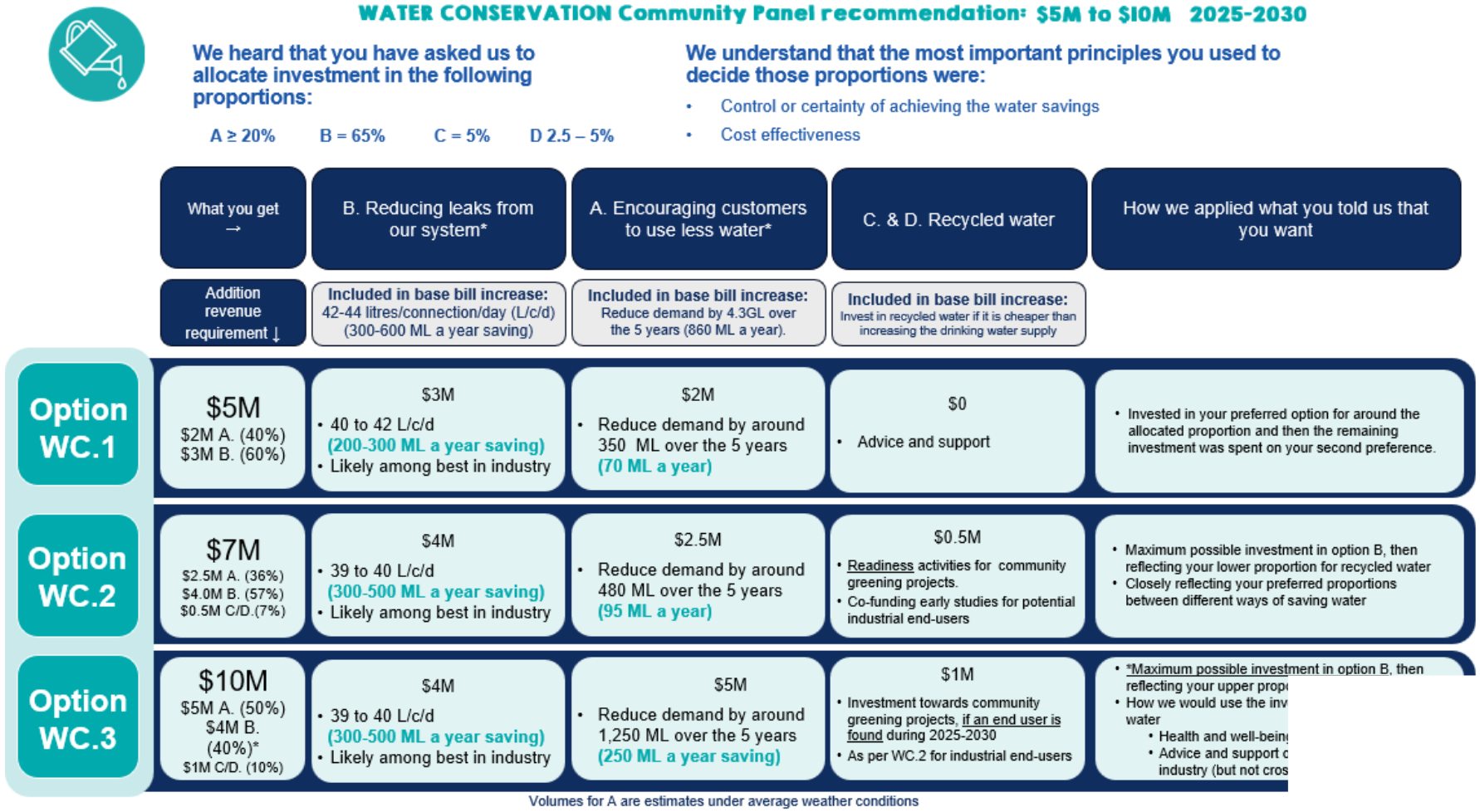
The fifth and final question the panel were asked to respond to was: **Approximately how much should we invest in this issue?** (i.e. water conservation)

To assist the panel with making their decision on the appropriate level of investment for water conservation, Hunter Water provided a set of options to consider (see Figure 15, at right) that would fit within the proposed revenue requirement range of $5 million to $10 million.

The participants were told they could "mix and match" the actions within each option to create a new combination of additional revenue and service levels. Hunter Water also explained that any extra investment in water conservation would be in addition to the base bill increase.

The panel's final decision on the level of investment for water conservation is outlined on the next page.

Figure 15 – Cost options for water conservation



3.2 Water Conservation Topic Question #5

After considering the various options for water conservation, the panel provided the following recommendation to Hunter Water:

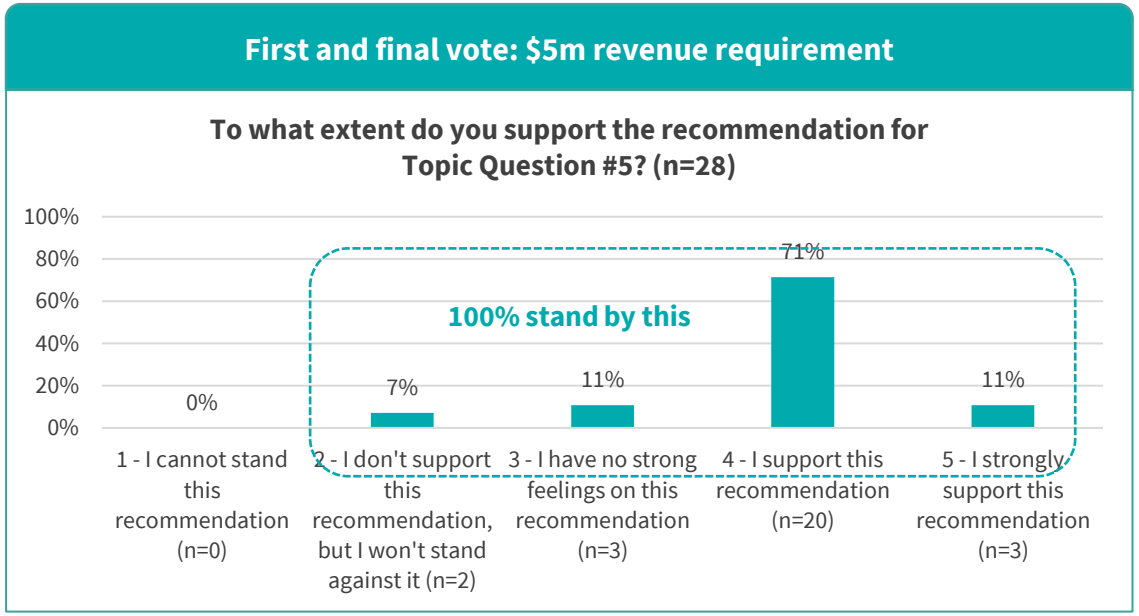
#5

- ***Revenue requirement of $5 million.***
- ***Comprised of the following elements from Option WC.1:***
  - *Encouraging customers to use less water – $1 million to reduce demand by around 230 ML over the 5 years (46 ML a year).*[2]
  - *Recycled water – $0 for advice and support.*
- ***And the following elements from Option WC.2:***
  - *Reducing leaks from our system – $4 million for 39 to 40 L/c/d (300-500 ML a year saving). Likely among best in industry.*

In addition, the panel provided the following justification for their recommendation:

- $4m for Option B (reducing leaks from the system) as this is the max that Hunter Water can use in the time period.
- $1m for Option A (encouraging customers to use less water) as we are unsure that customers will change. Extra may be a waste. More flexibility in advertising and education options.
- $0 for Option C and D (recycled water) as we do not want to be funding research for industrial users. Cost of living is crippling at the moment and this is a way to save money.

Chart 10 – Water conservation: Support for Topic Question #5 recommendation



The panel was then asked to vote on the level of support for the recommendation. Overall, 100% of panel members stood by the recommendation for a revenue requirement of $5 million.

Lastly, the panel members who didn't support this recommendation (but wouldn't stand against it) provided the following considerations:

- We're not spending enough. We're short selling ourselves. We've got to a minimum, and we're missing a golden opportunity to do more.

[2]Hunter Water provided approval for the panel to select a $1m revenue requirement range for encouraging customers to use less water, even though it wasn't included in the original set of options for the panel to consider.

CARBON REDUCTION FINAL RECOMMENDATIONS

Q1. HOW IMPORTANT IS THE ISSUE OF OUR CARBON EMISSIONS?

MUST MEET MIN. NSW GOV'T STANDARDS... ✓

BUT LESS IMPORTANT THAN CLEAN DRINKING WATER FOR ALL.

(WHICH CAN BE ENDANGERED BY CLIMATE CHANGE)

Q2 & 3 WHEN SHOULD WE ACHIEVE NET Ø? HOW MUCH SHOULD WE REDUCE OUR CARBON EMISSIONS by 2030?

NET Ø - 2050 — OUR ORIGINAL TARGET WAS NZ by 2035 (REVISIT BEFORE NEXT PRICE PERIOD)

✓ by 75% - 2030 → RENEWABLE ENERGY

! NOT CARBON CREDITS!

* USE OF NEW TECH IF AVAILABLE

* IF EARLIER, GREAT!

→ TREE PLANTING

Q4. WHAT ELSE SHOULD WE KEEP IN MIND RE: CARBON POLLUTION REDUCTION?

ACTIVELY INVESTIGATE NEW TECHNOLOGY, WHILE KEEPING SERVICES AFFORDABLE

✓ WE WILL CONTINUE TO DO THIS

KEEP ABREAST OF PUBLIC SENTIMENT AND TRENDS (BOTH IN AUSTRALIA & OVERSEAS)

IF WITHIN TARGETS, NO ADDITIONAL COST REQUIRED

✓ CONTINUE TO PURSUE MOST COST-EFFECTIVE OPTIONS, INC. CO-BENEFIT CONSIDERATIONS

HUNTER WATER COMMUNITY PANEL - 16.03.24

= HW RESPONSES

3.3 Carbon Reduction Topic Question #1

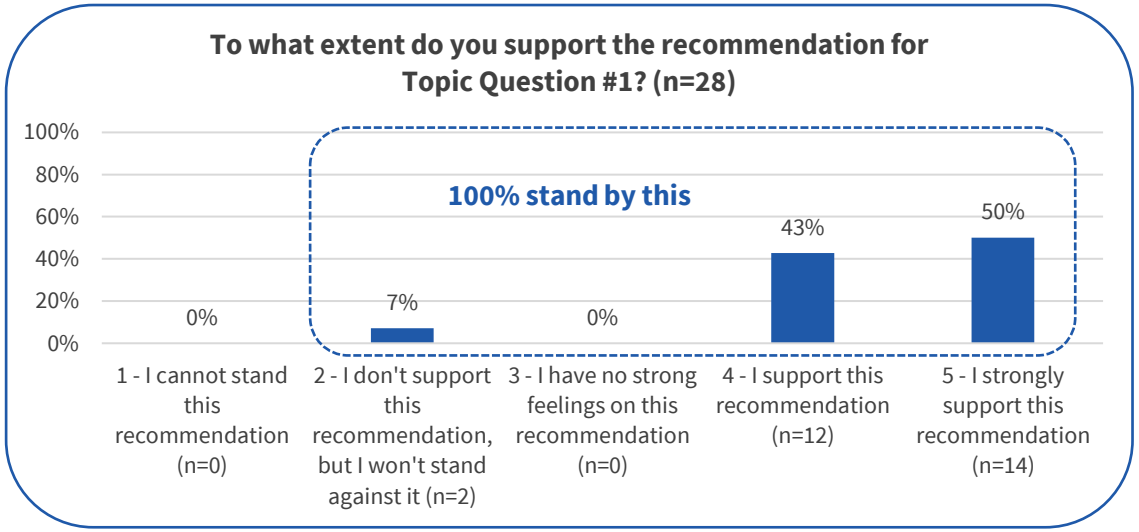
The panel provided the following recommendation to Hunter Water in response to Topic Question #1.

How important is the issue of our carbon emissions? ***#1***

> ***Carbon emission reduction is important to the level that Hunter Water meet the minimum NSW Government emission standard, however it is less important than the provision of clean drinking water for all customers.***
>
> ***Note: This is a clarification on the considerations to the issue of carbon emissions:***
>
> 1. ***We want to live in a healthy world.***
> 2. ***We should leave the environment in a better place than what we are doing now.***
> 3. ***Impact of climate change could affect the ability to have access to water.***

The panel was then asked to vote on the level of support for the recommendation. Overall, 100% of panel members stood by the recommendation for Topic Question #1.

Chart 11 – Carbon reduction: Support for Topic Question #1 recommendation



3.3 Carbon Reduction Topic Questions #2 and #3

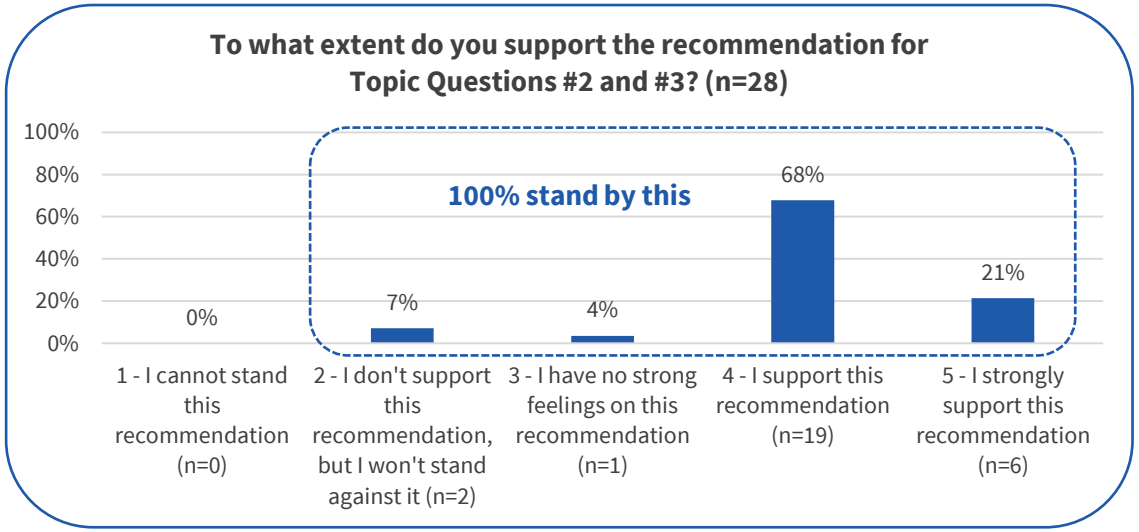
The panel provided the following recommendation to Hunter Water in response to Topic Questions #2 and #3.

When should we achieve Net Zero (scope 1 and 2) carbon emissions? How much should we reduce our carbon emissions by 2030? ***#2 & #3***

> ***1. Hunter Water should reduce carbon emissions by 75% by 2030. This should be achieved via use of renewable energy and tree planting rather than carbon credits.***
>
> ***2. Hunter Water should achieve net zero by 2050.***
>
> ***3. If/as new technologies emerge and become cheaper, Hunter Water can achieve these targets earlier without additional investment. Hunter Water should ensure this is done.***

The panel was then asked to vote on the level of support for the recommendation. Overall, 100% of panel members stood by the recommendation for Topic Questions #2 and #3.

Chart 12 – Carbon reduction: Support for Topic Question #2 and #3 recommendation



3.3 Carbon Reduction Topic Question #4

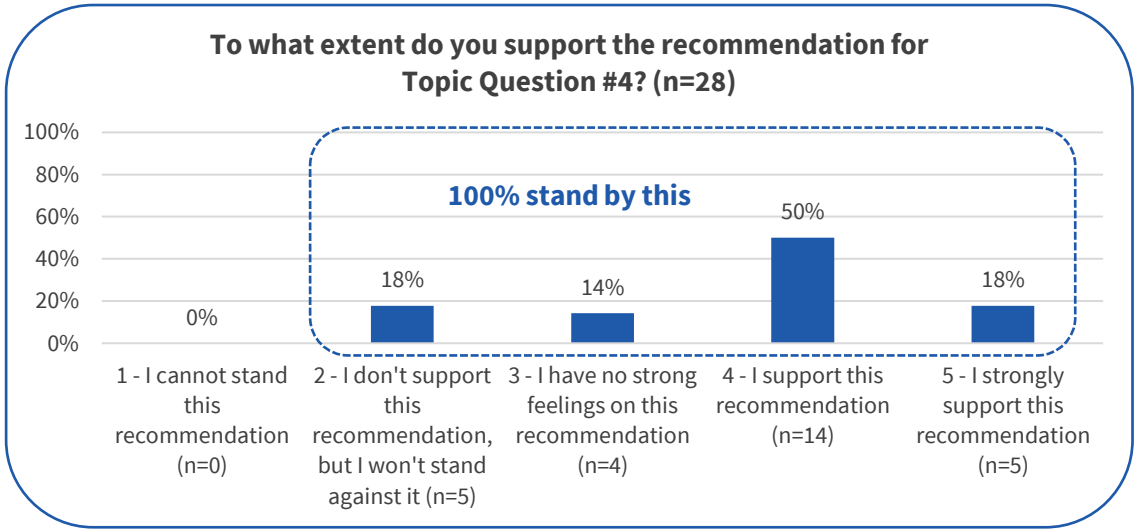
The panel provided the following recommendation to Hunter Water in response to Topic Question #4.

What else should we keep in mind when addressing the issue of carbon pollution reduction? **#4**

> ***Hunter Water should be actively investigating new technologies that support achieving the 2030 target of 75%, while keeping prices affordable.***
>
> ***Hunter Water need to be extremely selective with the carbon credit schemes, continue to monitor public appetite and opinions on carbon reductions, keep abreast of tech market trends both in Australia and overseas.***
>
> ***If Hunter Water is currently within their target (legislative target), no additional cost is warranted.***

The panel was then asked to vote on the level of support for the recommendation. Overall, 100% of panel members stood by the recommendation for Topic Question #4.

Chart 13 – Carbon reduction: Support for Topic Question #4 recommendation



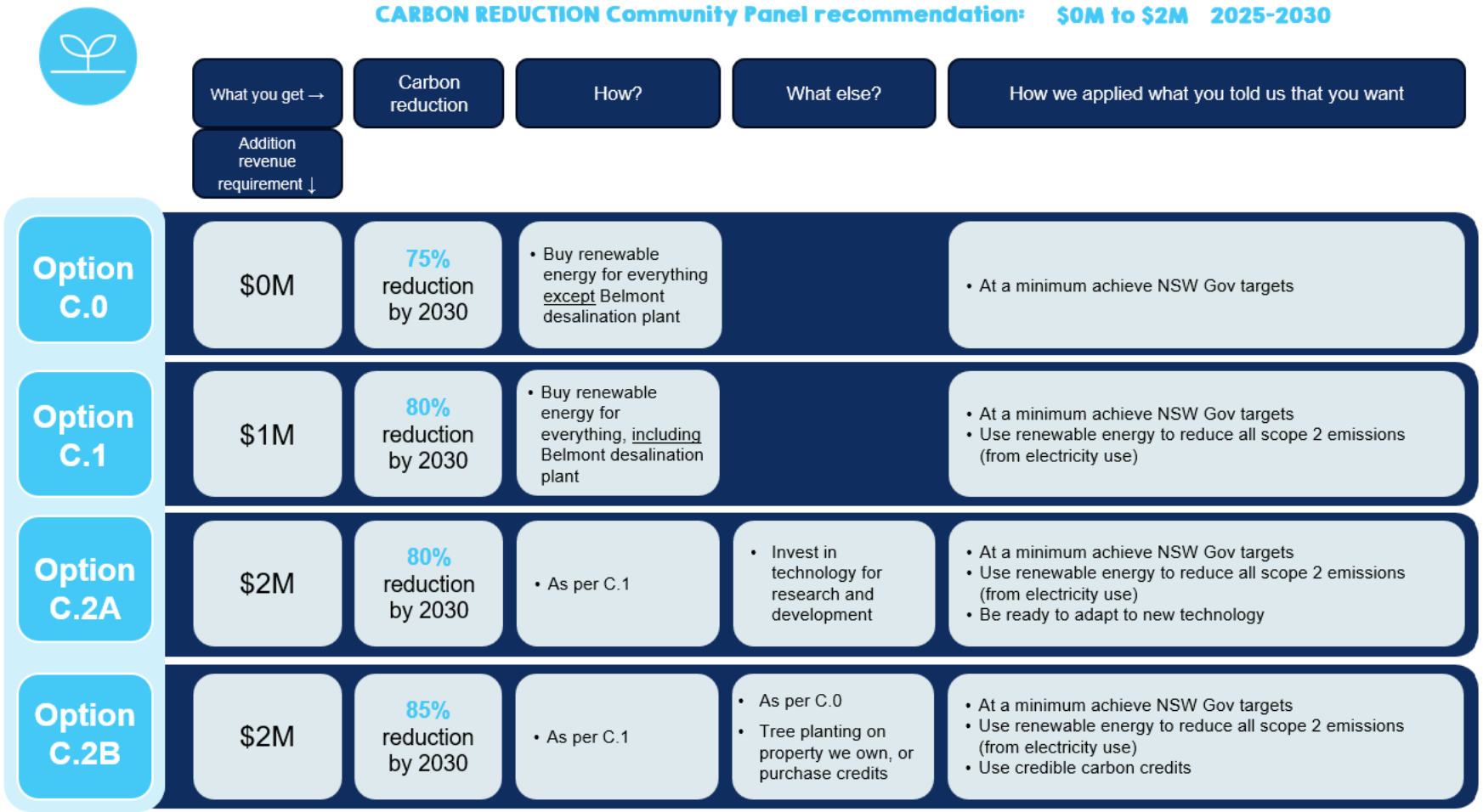
3.3 Carbon Reduction Topic Question #5

The fifth and final question the panel were asked to respond to was: **Approximately how much should we invest in this issue?** (i.e. carbon reduction)

To assist the panel with making their decision on the appropriate level of investment for carbon reduction, Hunter Water provided a set of options to consider (see Figure 16, at right) that would fit within the proposed revenue requirement range of $0 to $2 million. Hunter Water also explained that any extra investment in carbon reduction would be in addition to the base bill increase.

The panel's final decision on the level of investment for carbon reduction is explained on the next few pages.

Figure 16 – Cost options for carbon reduction



3.3 Carbon Reduction Topic Question #5

After considering the various options, the panel initially provided the following recommendation to Hunter Water:

#5

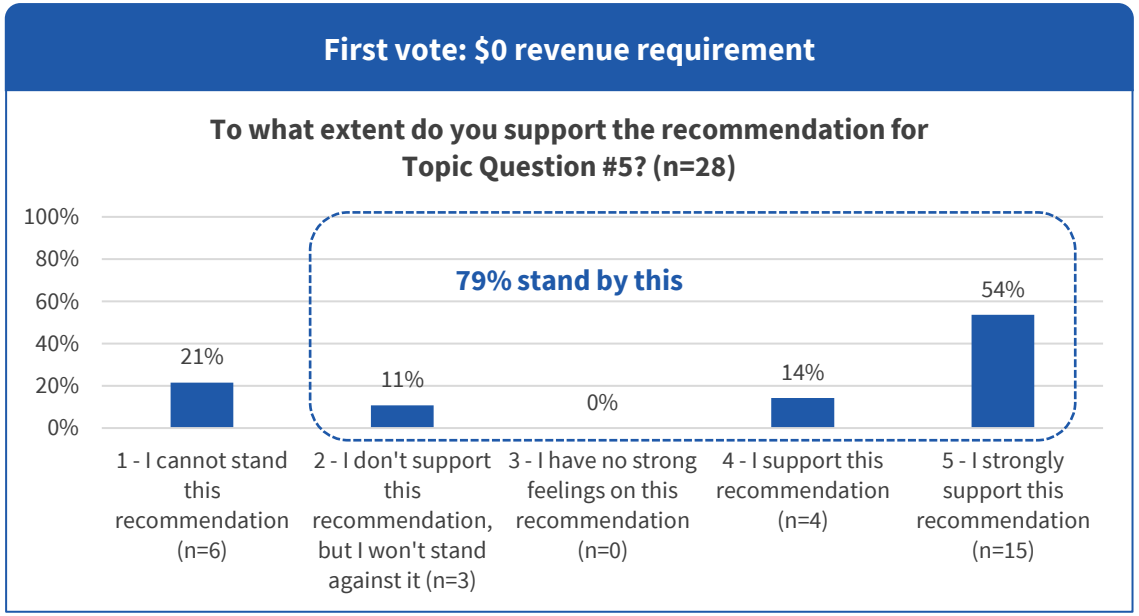
- ***Revenue requirement of $0.***
- ***Comprised of the following elements from Option C.0:***
  - *$0 for 75% reduction by 2030.*
  - *Buy renewable energy for everything <u>except</u> Belmont desalination plant.*
  - *At a minimum achieve NSW Gov targets.*

In addition, the panel provided the following justification for their recommendation:

- We chose $0 by majority (5 votes for $0, 3 votes for $1m, and 1 vote for $2m).
- Matches the statements we agreed upon already.
- Cost of living.
- Already exceeding legislative targets.
- 75% is already factored into this option. This is plenty without asking anything additional of customers.

The panel was then asked to vote on the level of support for the recommendation. Overall, only 79% of panel members stood by the recommendation for a revenue requirement of $0 (see Chart 14, at right). The facilitators explained to the group that this fell below the 80% criteria required to proceed with the recommendation.

Chart 14 – Carbon reduction: Support for Topic Question #5 recommendation



Next, the panel members who couldn't stand this recommendation were asked to provide their reasons, which included:

- Our generation has done a lot of damage, and we have an obligation to fix some of the damage we've done. If that money is not spent now, then it will need to be spent in the next period.
- If we want to get to net zero by 2050, then we need to spend money now to make the Belmont desalination plant renewable.
- The difference between 75% to 80% is only $1 million. So why wouldn't you look at renewable energy for the Belmont desalination plant?

3.3 Carbon Reduction Topic Question #5

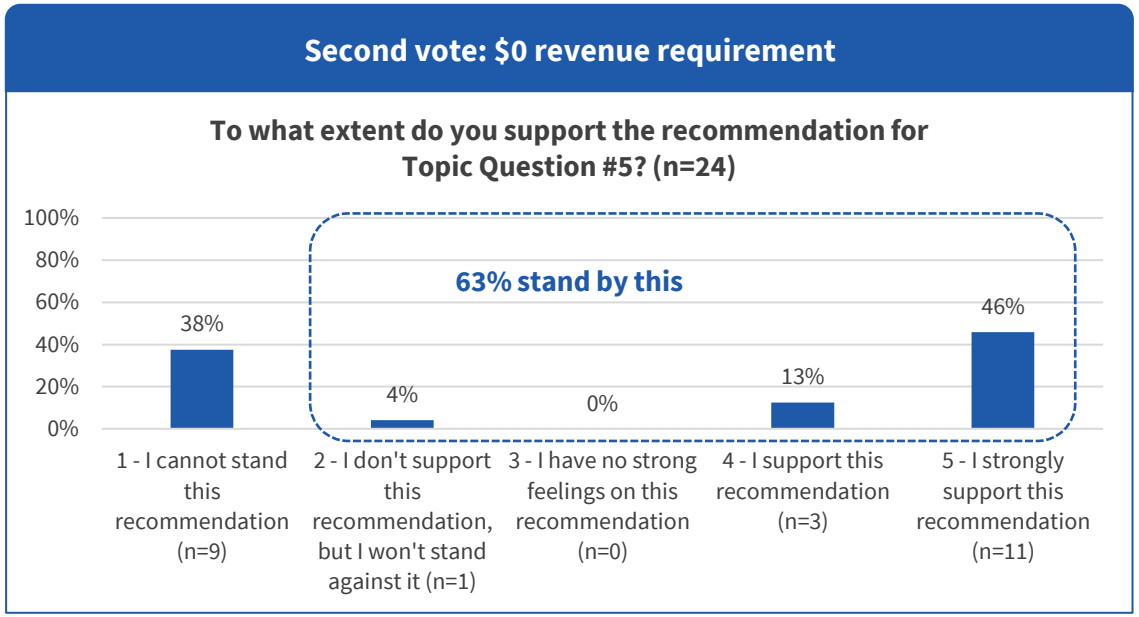
The participants who voted in support of the $0 revenue requirement were then asked to provide their reasons, which included:

- We're already paying $30 of the base bill increase for the desalination plant. A lot of people are doing it tough. It's a cost we don't need because we're already on track to a 75% reduction.
- The revenue requirement of $0 for a 75% reduction by 2030 aligns with the recommendations made in response to Topic Questions two and three, which received 100% support. It seems contradictory for a few people to turn around now and say they're not happy with the recommendation for no additional spend in response to Topic Question five.

A question was asked of the Hunter Water Managing Director, Darren Cleary, regarding the additional cost of the electricity supply contract that Hunter Water recently entered into for the period 2025-2031, which includes a transition to 100% renewable energy by 2030 (excluding the operation of the proposed desalination plant). The renewable energy component of the contract will be sourced from the Silverton Wind Farm in New South Wales. Darren explained that the contract Hunter Water already signed was 'least cost', that is, there was no additional cost for the renewable energy.

A further question was asked of Darren about why renewable energy for the Belmont desalination plant would cost more when the recently signed contract was cost neutral. Darren provided further clarification that Hunter Water would need to seek tenders from the energy market and whether there is an incremental cost for renewable energy for the Belmont desalination plant would depend on market responses at the time. The profile of when energy is needed and how much is needed could affect the price.

Chart 15 – Carbon reduction: Support for Topic Question #5 recommendation



Furthermore, another panel member asked: If the panel approves the $1 million revenue requirement to run the Belmont desalination plant by renewable energy, but renewable energy doesn't end up being the cheapest option, then what would Hunter Water do with that extra $1 million?

Darren Cleary responded by saying that Hunter Water would use the $1 million to achieve further carbon reductions in an effort to achieve net zero.

Following this discussion, the panel was asked to conduct a second vote on the $0 revenue requirement for carbon reduction. However, the panel was still unable to reach an 80% position, with only 63% of the panel standing by the recommendation (see Chart 15 above).

3.3 Carbon Reduction Topic Question #5

Next, the facilitators asked the panel to vote on the option to invest $1 million revenue requirement to achieve an 80% carbon reduction by 2030. Again, the panel was unable to reach an 80% position, with only 52% of the panel standing by this recommendation (see Chart 16, at right).

To progress the deliberation, Emma Turner (Senior Economist at Hunter Water) presented an alternative option to the group: Hunter Water would invest up to $1 million revenue requirement to power the proposed Belmont desalination plant with renewable energy, which would enable the corporation to achieve an 80% reduction in carbon emissions by 2030. But if Hunter Water can do this at no additional cost compared with buying non-renewable energy, then it would give the $1 million back to customers at the end of the five-year price period.

The group asked several questions to fully understand the alternative option and the commitment being offered by Hunter Water. The group was then asked to conduct a fourth and final vote on the alternative option. In this final instance, the group was able to reach 81% of panel members who stood by the revised recommendation (see Chart 17, at right). The voting for Topic Question #5 was then formally concluded.

Chart 16 – Carbon reduction: Support for Topic Question #5 recommendation

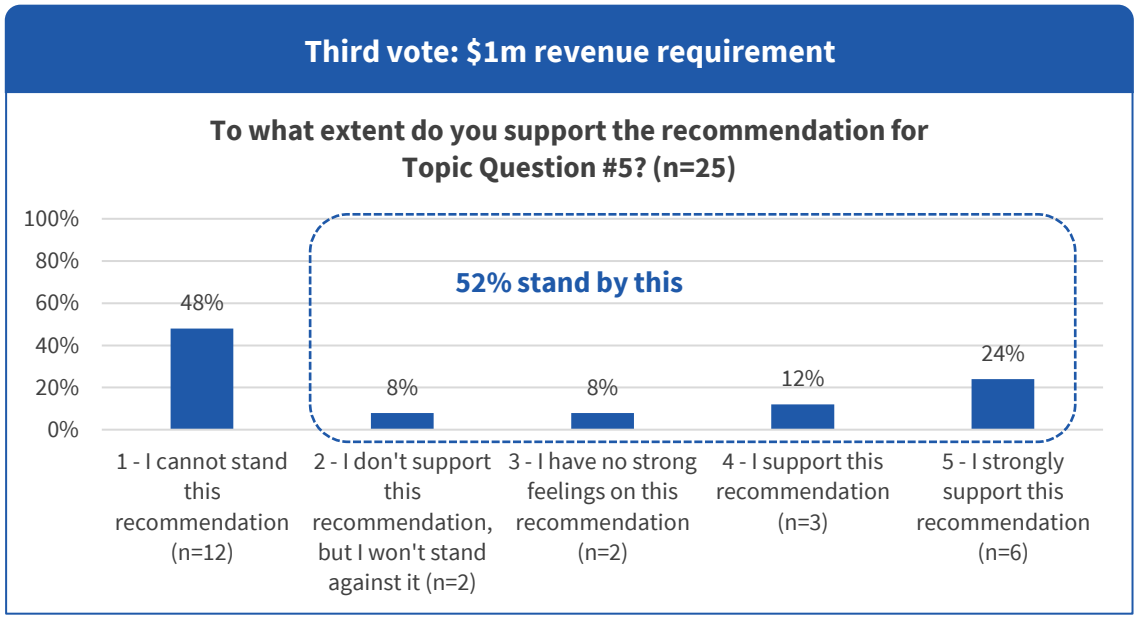
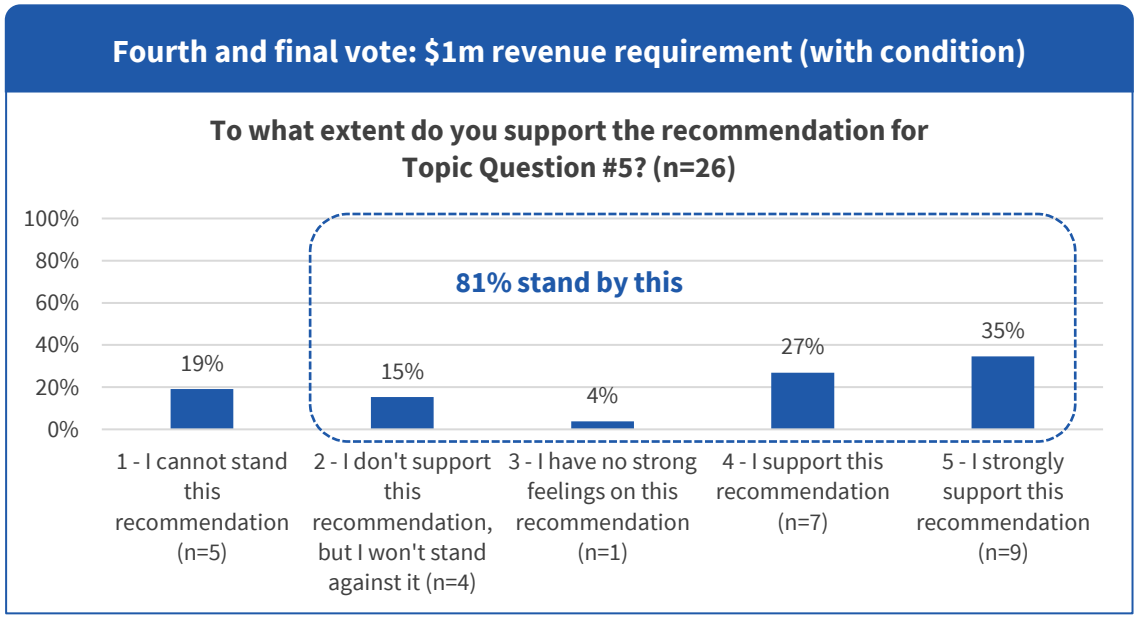


Chart 17 – Carbon reduction: Support for Topic Question #5 recommendation



INVESTMENT RECOMMENDATIONS

WATER CONSERVATION $5m

$4m — 300-500ML A YEAR SAVING — REDUCING LEAKS IN OUR SYSTEM

$1m — 46ML A YEAR SAVING — ENCOURAGING CUSTOMERS TO USE LESS WATER

$0 → NOT KEEN TO FUND INDUSTRIAL USERS FROM RESIDENTIAL CUSTOMER POCKETS!

RECYCLED WATER

100% STAND BY THIS

HOT SPOTS $3-4m

- ALL PRIORITY 1, 2 & 3 (~80) → WET WEATHER OVERFLOWS
- MOST PRIORITY 1 (~15)
- 2-3 LOW COST PRIORITIES 2&3 → ODOUR
- HALF PRIORITY 1 (~150)
- ~350 LOW COST P2&3 ISSUES → LOW WATER PRESSURE

86% STAND BY THIS

CARBON REDUCTION

% REDUCTION by 2030

75%	80%	80%	85%
$0m	$1m	$2m	$2m

ADDITIONAL REVENUE REQUIRED

$2m → INVEST IN TECH

$1m → MATCHES AGREED TARGET → AVOID EXTRA $ DURING CoL CRISIS, ALREADY ON TRACK

PUT TO VOTE: $0m = 63%, $1m = 52%

VOTE #2: $1m for 80%, IF ACHIEVED WITHOUT SPEND THAT MONEY IS TO BE RETURNED

79% STAND BY $0m

BUT HOW ARE WE TAKING CARE OF THE FUTURE FOR THE NEXT GENERATION?

WHY SLOW PROGRESS?

THE SOONER, THE BETTER

IT'S WORTH $1M

81% STAND BY THIS

ESTIMATED IMPACT ON BILL

2025 $2.15 - $2.70 → 2030 $10.75 - $13.50

HUNTER WATER COMMUNITY PANEL - 16.03.24

4.0 Next steps

4.0 Next steps

Now that the community panel has finished, Hunter Water will draft its pricing proposal incorporating the panel's recommendations to the maximum extent possible.

Clear linkages will be made demonstrating how customers have influenced expenditure decisions made by the organisation. A summary of the close the loop process has been outlined in Figure 17 (at right).

Figure 17 – Summary of close the loop process

Step 1	**The Customer Engagement Advisory Panel (CEAP) will consider whether the process has been fair, authentic, comprehensive, universal and inclusive** The CEAP may choose to express its level of comfort in written form.
Step 2	**Close the loop session** The community panel will be brought back together to confirm that the submission reflects their recommendations, and for a celebration event. At this session, Hunter Water will present a report of outcomes and update the participants on progress since the conclusion of the deliberation.
Step 3	**Public exhibition period** IPART will put Hunter Water's pricing proposal on public exhibition for community and stakeholder feedback.
Step 4	**Positioning for performance stewardship** A group of customers may meet annually to monitor Hunter Water's performance against its customer promises (rather than the organisation rating itself). Members of the community panel will be welcome to join this group, and to hold Hunter Water accountable for implementing its plans. Hunter Water intends to further explore this as part of its stage four customer engagement.

Appendices

Appendix A: Feedback and continuous improvement

Appendix B: Demographic breakdown of panel members who attended the Orientation

Appendix C: Guidebook

Appendix D: Engagement Report

Appendix E: Bill impact look-up table

Appendix F: Guest contributor bios

Appendix G: Other resources provided to panel members

Appendix A: Feedback and continuous improvement

Participants were sent a pre-event survey to complete before the Orientation event, and a post-event survey to complete after Day Five had concluded. They were asked to respond to the statements selecting a 5-point scale from 1=Strongly disagree to 5=Strongly agree. There was also an option for “Don’t Know”. The results of the two surveys are shown on the next page and are shown as percentage favourable scores, i.e. the proportion of respondents selecting either four or five.

The results show that the percentage favourable scores increased across all key metrics and almost all customer service metrics. The biggest shift amongst the key metrics was for the item“Hunter Water delivers value for money” (+23%), and the biggest change amongst the customer service items was for the item “Hunter Water is doing its bit to combat climate change” (+54%). There were two items that declined within the customer service questions, including the item “Hunter Water provides a reliable service’ (-7%), as well as the item “Hunter Water helps customers to save water” (-3%).

Insync seeks feedback to ensure continuous improvement in our processes and methodology. For this project, in addition to the pre-event and post-event surveys, we also asked panel members to complete evaluation polls following session one, two, three and four – these results are also on the following pages.

Feedback from PIAC and CEAP

A representative from the Public Interest Advocacy Centre (PIAC) observed the sessions and provided extensive feedback. The feedback included a mixture of positive observations and suggestions for improvement. On the following pages we have included a summary of their feedback and how it was used to adapt the process.

We also received feedback from the Customer Engagement Advisory Panel (CEAP). This feedback and how it was used can be found here.

Table 8 – Pre-event and post-event survey results

	Survey item	Pre-event survey results (n=36)	Post-event survey results (n=23)	Change
Key metrics	Hunter Water delivers value for money	47%	70%	+23%
	Hunter Water has a good reputation in the community	72%	83%	+11%
	Overall, I am satisfied with Hunter Water as a service provider	83%	83%	0%
	I trust Hunter Water	64%	78%	+14%
Customer service items	Hunter Water provides a reliable service	94%	87%	-7%
	Hunter Water responds quickly to disruptions (e.g. leaks and bursts)	53%	61%	+8%
	Hunter Water communicates with customers when there is an incident	39%	52%	+13%
	Hunter Water manages the wastewater system well	53%	70%	+17%
	Hunter Water is efficient and well managed	42%	74%	+32%
	Hunter Water makes effective plans for the future	31%	83%	+52%
	Hunter Water is a highly competent organisation	42%	78%	+36%
	Hunter Water is easy to deal with	75%	91%	+16%
	Hunter Water has excellent customer service	58%	78%	+20%
	Hunter Water helps customers to save water	60%	57%	-3%
	Hunter Water keeps my personal information private and protected	49%	61%	+12%
	Hunter Water has customers' best interests at heart/acts in its customers' best interests	34%	65%	+31%
	Hunter Water cares for customers having trouble paying their bills	31%	61%	+30%
	Hunter Water does the right thing	43%	78%	+35%
	Hunter Water makes a positive contribution to the community	69%	87%	+18%
	Hunter Water cares for the local natural environment (e.g. waterways, wetlands, beaches etc)	71%	74%	+3%
	Hunter Water is doing its bit to combat climate change	29%	83%	+54%
	Hunter Water has fair and reasonable prices	34%	52%	+18%
	Hunter Water provides accurate bills	66%	87%	+21%
	Hunter Water has transparent prices	57%	74%	+17%
	Hunter Water has affordable bills	31%	61%	+30%
	Hunter Water is a leading organisation	49%	74%	+25%
	How confident are you that your recommendations on Hot Spots will be implemented by Hunter Water?	-	65%	-
	How confident are you that your recommendations on Water Conservation will be implemented by Hunter Water?	-	65%	-
	How confident are you that your recommendations on Carbon Reduction will be implemented by Hunter Water?	-	57%	-

Appendix A: Feedback and continuous improvement

After the community panel concluded, participants had an opportunity to submit written feedback on what they enjoyed most about the sessions and what they thought could be improved. A sample of their feedback has been included below.

What did you enjoy most about the sessions?

"Learning about Hunter water and their challenges. Meeting other panel members and being part of the decision-making process."

"Being able to engage in a topic that impacts my community with other people who were also cared. It was fast paced and therefore interesting to me. I went into the process expecting to get bored, but I didn't."

"It was a new experience for me, and I met new people. I also got to see a new side of Hunter Water that I never knew existed and gained some knowledge about Hunter Water that I would never have otherwise received."

What could we do better in future sessions?

"Sent the information pack out earlier. More diversity of committee members maybe through the Uni and high schools."

"It would have been a better experience if the whole process had been better explained at the beginning rather than let it be an unfolding process."

"More time prior to sessions for reading as at times there was a lot to digest and be comfortable with before the sessions. I think a few panel members felt the same and that we had to fit the reading in after work."

Any other comments?

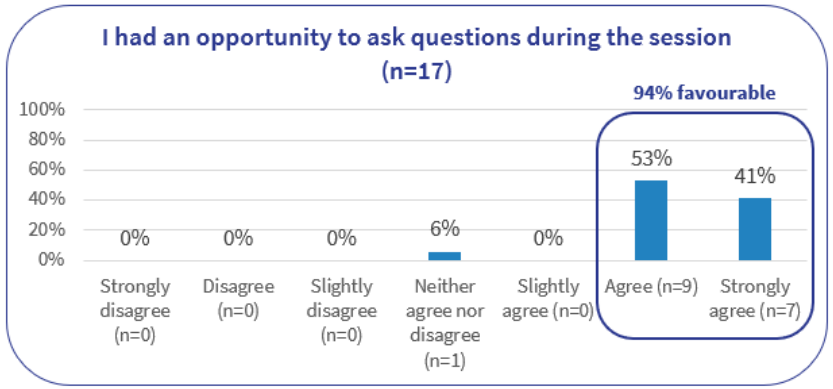
"I think looking back over the four months it was challenging trying to think of the affect [sic] it will have on Hunter Water's community in terms of price and services yet looking to the future and facing the prospects of climate change and carbon emissions."

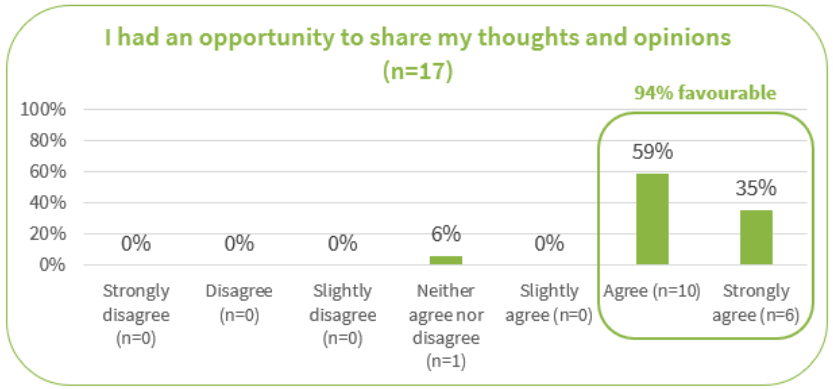
"I feel like I just stood back and allowed our water bills to increase way too much… I feel bad for the young families of the Hunter, that we have left them with a large bill for an essential service that they are stuck paying for and when HW customers complain they will blame the community panel… thanks for the opportunity, I just wish I used it more wisely."

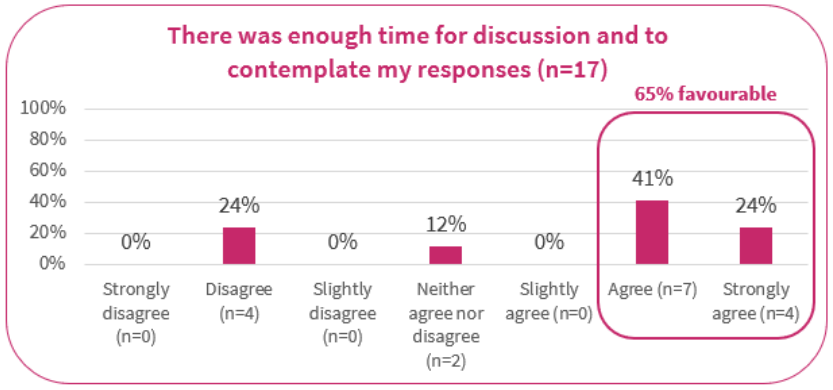
Appendix A: Feedback and continuous improvement
Day One evaluation and feedback

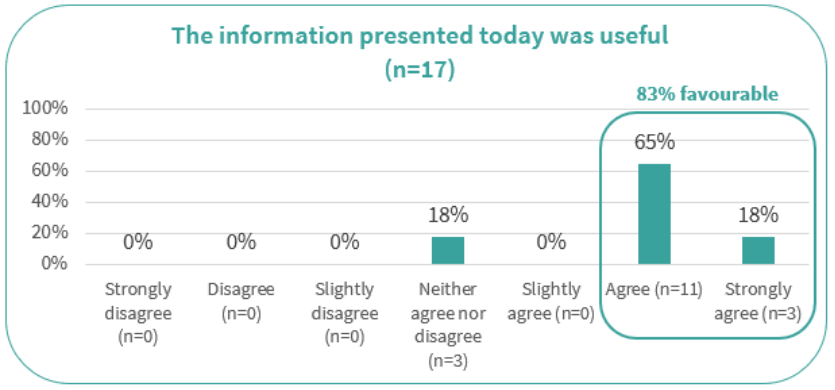
At the end of Day One, the participants were asked to respond to four evaluation polls. The results have been presented below. The results showed that a few participants disagreed that they had enough time for discussion and to contemplate their responses. To address this feedback on Day Two, Insync provided space for participants to question Hunter Water in a fishbowl activity and allowed extra time for participants to contemplate their responses in small group activities.

Figure 18 – Day One evaluation poll results









PIAC feedback

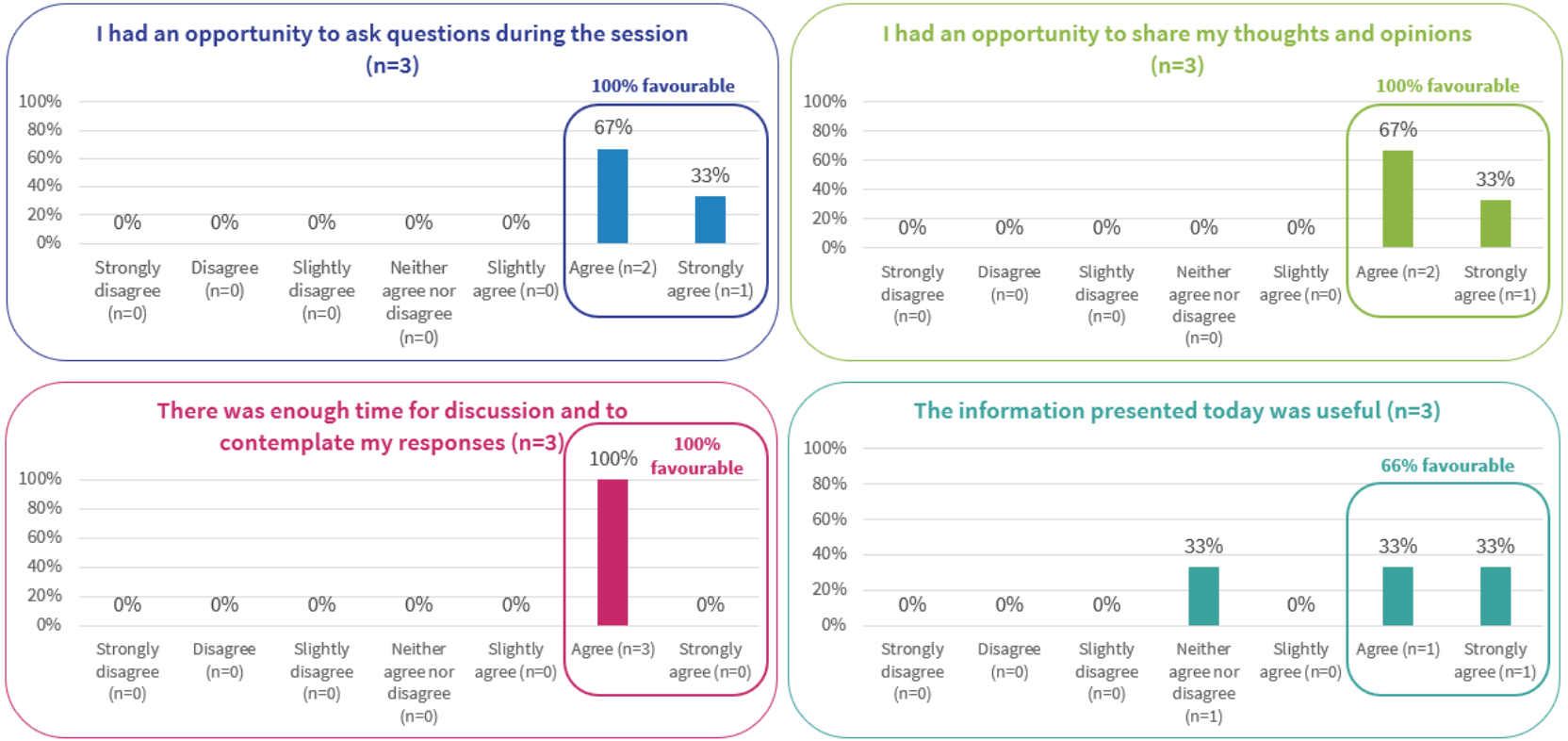
PIAC shared concerns about the lack of diversity on the panel. To address this, we invited two panel members to attend and report back on what they heard at the 'Hunter Insight Series: Youth Perspectives' event and to seek out the views and perspectives of younger people within their own circle/network. We also asked the panel to read specific pages in the Engagement Report that show the views of different demographic cohorts.

There was concern about the information provided to the panel from the guest contributors during the small group discussions. Ahead of Day Two, Insync briefed the guest contributors to ensure they were fully comfortable in their role and had consistent approaches to participate in discussions, respond to questions and provide feedback.

Appendix A: Feedback and continuous improvement
Day Two evaluation and feedback

At the end of Day Two, the participants were asked to respond to the same four evaluation polls. The results have been presented below. While only three panel members completed the poll (we think this was due to time constraints), the results showed that these participants agreed they had enough time for discussion and to contemplate their responses, and that they had the opportunity to ask questions and share their opinions.

Figure 19 – Day Two evaluation poll results



CEAP feedback

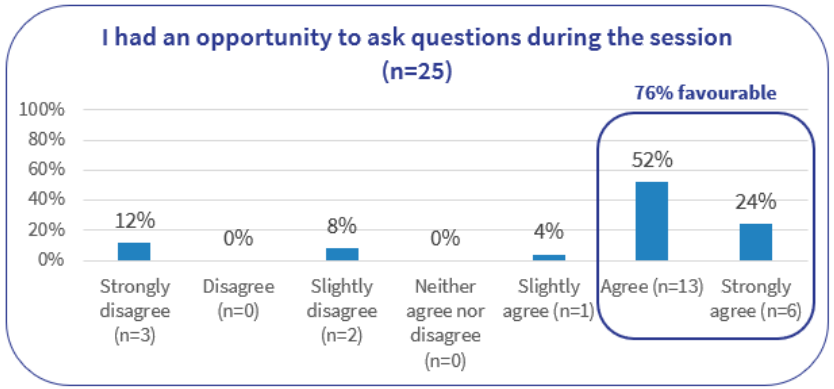
Part of Day Two focused on giving the panel information about the base bill increase. CEAP's observations of the day highlighted a sense of frustration from the panel. The panel questioned why the information on the base bill increase wasn't provided sooner, and whether their scope for a bill increase of only $0-$6 each year, every year, for a typical customer was meaningful ($0 to $6, $12, $18, $24, $30 = $90 total across the five-year pricing period).

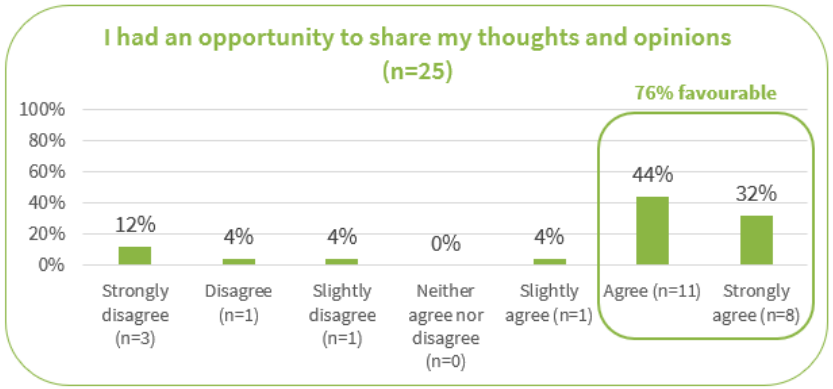
Hunter Water answered these questions on the day and addressed all follow up questions about the base bill increase in subsequent sessions. The facilitators and subject matter experts also repeatedly emphasised to the panel that their recommendations would be made in addition to the base bill increase.

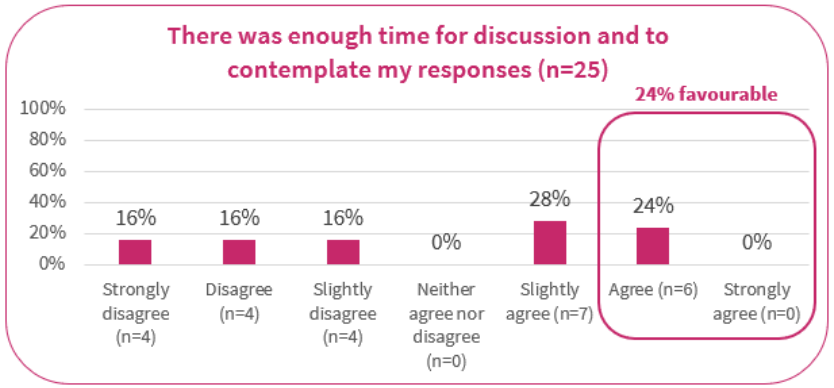
Appendix A: Feedback and continuous improvement
Day Three evaluation and feedback

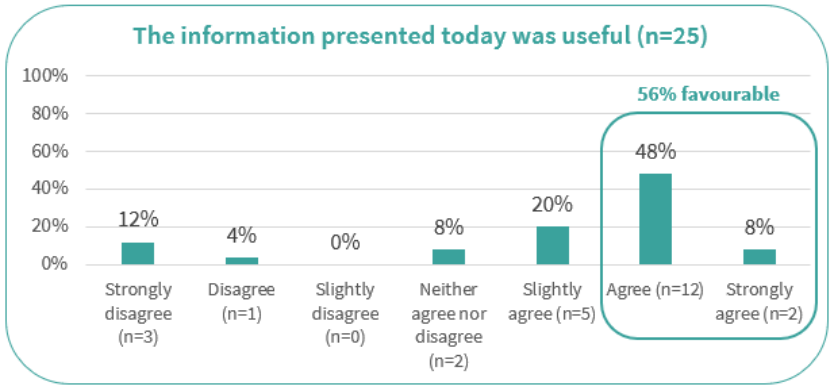
At the end of Day Three, the participants were asked to respond to the same four evaluation polls. The results have been presented below. The results showed that there was a level of disagreement across all four questions. Ahead of Day Four, Insync reflected on the online format and made some changes to lengthen the activities, particularly the small group discussions. Insync also tried to provide more context to the information that was presented on Day Four, including the information that was provided by guest contributors.

Figure 20 – Day Three evaluation poll results









PIAC feedback

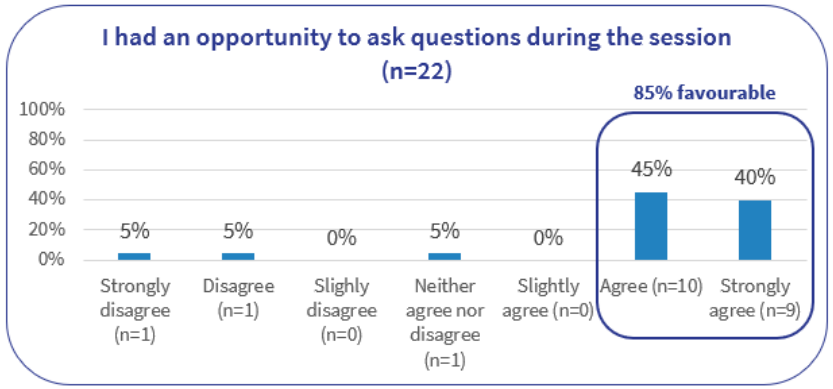
There was concern about the online session format. Insync mitigated the technical challenges by allowing extra time for participants to review and provide feedback on the draft recommendations. Insync closely monitored the digital worksheets to ensure no content was lost, and if required, had plans to restore the original content using the version history functionality.

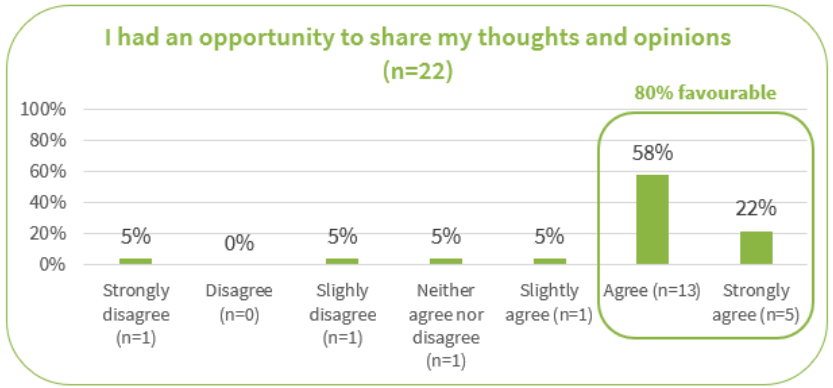
Insync redesigned the process for when participants were asked to refine and pitch their final recommendations. Rather than allocating them straight into small groups to refine their recommendations, Insync gave the panel members time to individually reflect on the draft recommendations from the previous session.

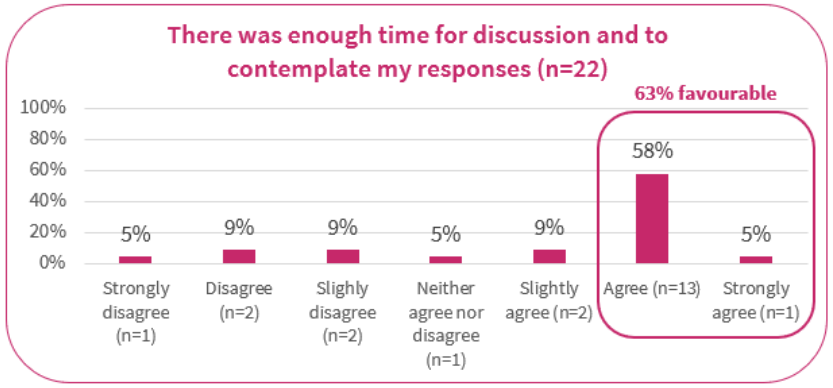
Appendix A: Feedback and continuous improvement
Day Four evaluation and feedback

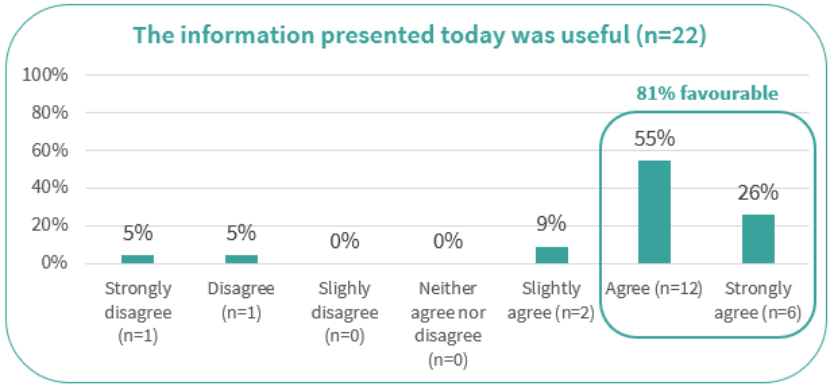
At the end of Day Four, the participants were asked to respond to the same four evaluation polls. The results have been presented below. The results showed an improvement across all four questions. However, there was still a level of disagreement that there was enough time for discussion and to contemplate responses. Ahead of Day Five, Insync made changes to the run sheet to allocate participants into pairs to make final revisions to their recommendations. Insync also allowed extra time to finalise the level of investment recommendations.

Figure 21 – Day Four evaluation poll results









PIAC feedback

While there was feedback on the panel's behaviour in the small discussion groups, it was decided to let the participants self-facilitate those discussions. This was done to allow the group to have ownership over their discussions. However, to ensure the conversations stayed in scope and on topic, the facilitators regularly visited the breakout rooms.

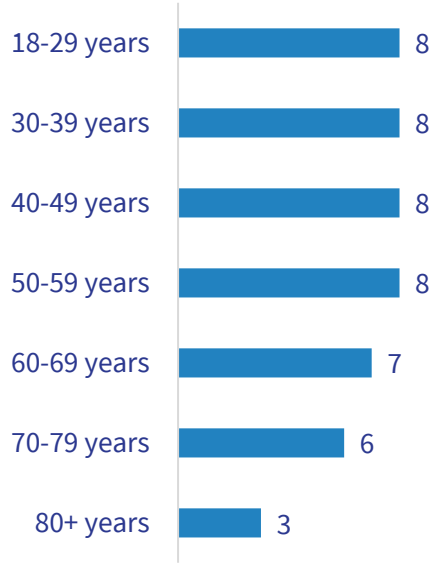
Day Four focused on carbon reduction and there was some confusion around the different statistics and targets. This was addressed by giving the panel written feedback on their recommendations ahead of Day Five. This clarified the confusion around the different targets and was used at Day Five to help the panel refine their recommendations.

Appendix B: Demographic breakdown of panel members who attended the Orientation

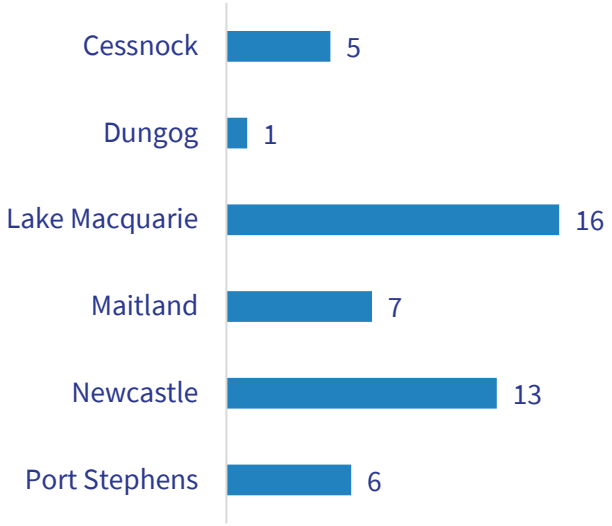
Target

Participants	48	
What is your gender?	Female – 24	Male – 24
Are you a residential or non-residential customer?	Residential – 46	Non-residential – 2
Do you own or rent your home?	Own/paying mortgage – 33	Rent – 15
Aboriginal and/or Torres Strait Islander	Yes – 3	No – 45
Concession card holder	Yes – 19	No – 29
Culturally and linguistically diverse	Yes – 3	No – 45

Age group:



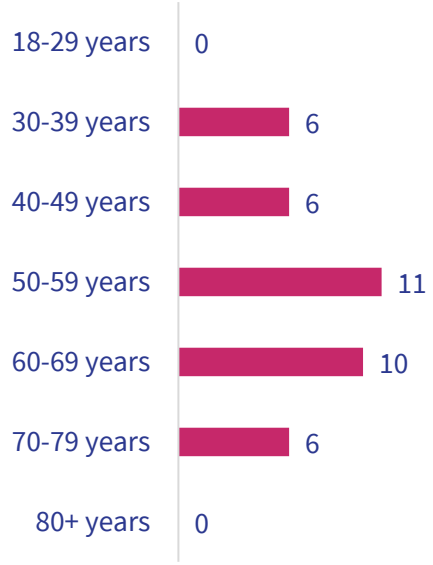
Region:



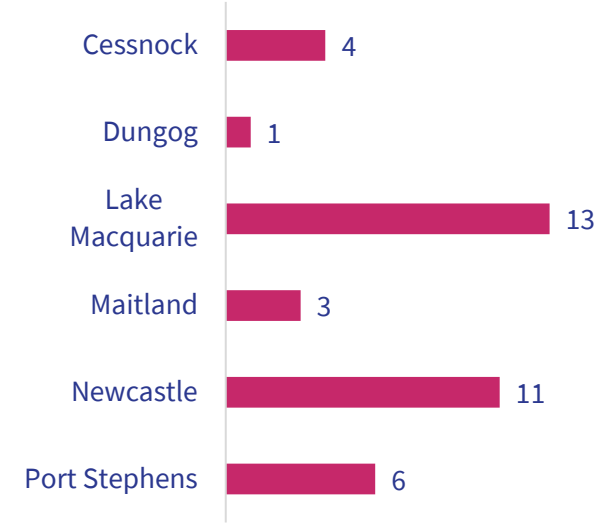
Attended Orientation

Participants	39	
What is your gender?	Female – 16	Male – 23
Are you a residential or non-residential customer?	Residential – 37	Non-residential – 2
Do you own or rent your home?	Own/paying mortgage – 36	Rent – 3
Aboriginal and/or Torres Strait Islander	Yes – 3	No – 36
Concession card holder	Yes – 13	No – 26
Culturally and linguistically diverse	Yes – 5	No – 34

Age group:



Region:



2025 Price Proposal
Community Panel

Guidebook

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

Contents

Welcome from Hunter Water

Congratulations and thank you for participating in Hunter Water's 2025 Price Proposal Community Panel (Community Panel). It's a pleasure to welcome you.

As a Community Panel member, you will make an invaluable contribution to shaping our services and prices.

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

Hunter Water's customers and communities are faced with a challenge.

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. We are also faced with some important decisions that will impact customer bills.

As a utility, we need to respond to the challenges of drought and climate change, support a growing population, and deliver the outcomes expected by our customers and community.

We have a plan to secure our water supply into the future which includes significant investment in our infrastructure. These costs, along with the increases to providing our day to day services, will be passed on to our customers.

At the same time, increasing numbers of our customers are finding it hard to make ends meet.

Water is life and we are creating a sustainable water future for all. We need the community's help to make the wisest possible decisions for the immediate future, and for future generations. We need to have a clear answer to this question by September 2024, when we will propose to our economic regulator, the Independent Pricing and Regulatory Tribunal (IPART), what our prices should be from 2025 through to 2030.

As a Community Panel member, we invite you to work with us in answering this question, on behalf of the whole community, and promise to incorporate your recommendations into our plans to the maximum extent possible. There are no easy answers - we can only answer this challenge by working in partnership with you, our customers.

Over the past 18 months, we've had extensive conversations with our customers and community to understand what's important to them. Affordability, water security, sustainability and reliability of our water and wastewater services are known priorities for our customers and community.

Panel members will be provided with information and evidence from a wide range of sources to assist in deliberations. You'll be provided with insights from our extensive customer and community engagement. We understand that if you're expected to make decisions for the broad community, it's important you understand what they value, and how much they value it.

Subject matter experts, including those who you specifically ask to hear from, will be invited to provide their expertise and advice as requested by the panel.

Welcome from Hunter Water

We want to assure you that to make a difference, you don't need to be an expert. Your voice is what matters. We're committed to ensuring this is a transparent and supportive process. Panel members will be able to discuss and weigh up a range of ideas and put forward final recommendations.

We'll also remain transparent about the things we can't influence and, if something isn't feasible, we'll explain why.

Thank you again for taking the time to participate in this important process. We look forward to working together with you to ensure we continue to meet the needs and aspirations of our customers and growing community, now and into the future.

Darren Cleary

Managing Director

About this guidebook

This guidebook provides all the practical information you will need to be an active member of the Community Panel. It seeks to support you in your role to consider the issues and to provide informed advice to Hunter Water.

Who is Hunter Water?

Hunter Water provides high quality water services for a population of over 630,000 in homes and businesses across the Lower Hunter region. We are proud of the important and significant contribution we make to the health, wellbeing and prosperity of our region.

Who is Hunter Water?

Our area of operations is 6,671km² and includes the local government areas of Cessnock, Dungog, Lake Macquarie, Maitland, Newcastle, Port Stephens and a small part of Singleton.

Our service area and traditional boundaries

We are owned by the New South Wales Government and are governed by the *State Owned Corporations Act 1989* and the *Hunter Water Act 1991*.

We're responsible for:

- clean, safe drinking water coming out of your tap,
- taking away the used water that goes down your drains from sinks, toilets, laundries, showers and baths, then treating it to protect the health of beaches and waterways (we also reuse a small proportion of it), and
- stormwater drainage in very small parts of Newcastle, Lake Macquarie and Cessnock.

We're **not** responsible for:

- stormwater drainage at a local level (e.g. kerb inlet pits) anywhere,
- stormwater flooding,
- stormwater quality, and
- septic tanks.

Purpose

You are one of a representative group of Hunter Water 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?

What is a 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 customer group will come together to deliberate and advise on some big strategic questions.

You are not expected to have an expert understanding of the subject matter. The role of the Community Panel is to meet over multiple days to build knowledge and understanding, and to consider and weigh up the identified issues. You will be given time, access to information, the chance to learn from others, and a clear level of authority to deliberate successfully.

The Community Panel will conclude its deliberations by providing a clear set of recommendations which will be incorporated into the Hunter Water price proposal to the maximum extent possible.

We have adopted the OECD's international Good Practice Principles for Deliberative Processes for Public Decision- Making

You may have heard of the OECD – the Organisation for Economic Co-operation and Development. The OCED is a key international standard-setting organisation. The OCED has collected a wealth of evidence about how deliberative processes work across different countries, and has created a set of guidelines that we will use for our sessions together. The principles are listed above. If you are interested, you can find more details online here: https://www.oecd.org/gov/open-government/good-practice-principles-for-deliberative-processes-for-public-decision-making.pdf

How was the Community Panel selected?

Using a fair process to randomly select the participants is an important part of ensuring a forum's recommendations can be trusted.

Our Community Panel is made up of approximately 50 members.

Independent recruitment specialists, Deliberately Engaging, undertook the selection process, issuing over 12,000 invitations to Hunter Water customers. Once registrations closed, Deliberately Engaging filtered the registrants based on age, gender, location, level of interest in water and other demographics to ensure the forum was broadly representative of our community and our different customer types.

Neither Hunter Water nor the independent facilitators of the deliberative forum, Insync, were involved in the selection of panel members.

Some people are very passionate about water, and others have no interest at all. Sometimes, people doubt the recommendations of a forum because they assume it was filled with "water warriors". To avoid this, the "level of interest in water" filter was included to ensure the forum is no more interested in water than the population at large.

There are also vocal representatives of various parts of our community who have strong views about the topics that the forum will consider. An important part of the recruitment process is that these people could not force their way into the forum (unless they were randomly selected to receive an invitation). Using the analogy of a courtroom, these people are the "expert witnesses" and the panel members are the jury. The forum will have a chance to listen to and learn from these people, but the task is to decide what is best for the whole community.

The selection process ensures the involvement of customers with different experiences, from different backgrounds and locations, who will have different approaches to problem-solving.

How will the forum work?

The Community Panel will meet over six sessions. You will be provided with information and evidence to assist your deliberations. Subject matter experts will be invited to provide their expertise, and you will have the opportunity to request additional advice.

The process is a facilitated discussion that is designed to allow you to work through small pieces of information from reading, listening to presenters, discussing evidence, coming up with ideas, ranking ideas, writing recommendations, editing, and testing agreement. This work happens in both small groups and the whole group.

Independent facilitators will support the forum. You will meet the Insync team at your first meeting. Having an independent facilitator is vital so that the forum isn't led in a particular direction by Hunter Water.

The forum will deliberate and make recommendations on the following strategic question:

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

The aim of the Community Panel is for you, as part of a representative customer group, to provide advice and recommendations on strategic decisions. As a selected member of the Community Panel, you will be given access to experts and time to deliberate.

- **Participation level:** We have aligned our approach with the International Association of Public Participation (IAP2) Spectrum of Participation level of ‘Collaborate’ (Hunter Water will look to you for advice and innovation in formulating solutions). More information about the IAP2 Spectrum will be provided in the Engagement Report which you will receive prior to Day 1.
- **Method:** Deliberative forum (consensus decision making).
- **Output:** Agreed recommendations for Hunter Water to incorporate in its plans to the maximum extent possible.

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Our role

The Community Panel is an opportunity for customers to collaborate with Hunter Water on its 2025-2030 price proposal to IPART. The recommendations from the forum will be incorporated into the Hunter Water price proposal to the maximum extent possible.

The Community Panel is a deliberative process, which means participants will:

- discuss the issues, challenges and opportunities in-depth,
- hear what other customers and community members have said about our services and pricing,
- consider a broad range of information and hear from guest contributors, and
- work together to come to a shared position on services and pricing.

As part of this process, it's expected that everyone – including the facilitators, project team representatives, guest contributors, observers and panel members – are respectful of each other. Different views and healthy disagreements are encouraged and welcomed as part of the process.

We promise to incorporate the Community Panel's recommendations into our plans to the maximum extent possible.

We will present a 'baseline' bill increase comprised of factors beyond our control such as inflation, as well as decisions that have already been made that will impact bills. This will help the Community Panel to make recommendations in the knowledge of the potential cumulative bill impacts.

We'll also remain transparent about the things we can't influence and, if something isn't feasible, we'll explain why.

Your role as a panel member

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 subject matter experts,
- discuss issues and ideas with your fellow panel members and weigh up the evidence and information presented to you, and
- agree on the final recommendations which will be presented back to Hunter Water to incorporate to the maximum extent possible.

You don't need to be an expert to participate. You will have access to a range of information, including the findings from the previous customer research.

As well as hearing from expert speakers and key stakeholders, you will also have smaller group discussions, share your views and learn more about other people's ideas and perspectives.

Expectations of panel members

1. Read this guidebook and other background materials as provided.
2. Attend all sessions – while we recognise that life can be unpredictable, it's important you attend all sessions of the deliberative forum. Please advise Jane Tyquin jtyquin@insync.com.au of any changes to your availability.
3. Participate in an open, respectful and thoughtful manner.

Everybody should feel safe

The rigorous recruitment process means that there are people in the room from all walks of life. That means all panel members need to hold back a little to ensure everybody feels safe to speak without fear of judgement.

The rules of social interaction that work for you and your friends probably don't apply to all cultural groups, all ages and all genders. People have different senses of humour, different expectations about taking turns in conversations, and different ways of disagreeing.

Three useful rules to keep in mind:

1. Disagree without being disagreeable,
2. Monitor how much you're speaking, and don't take more than your share of the airtime, and
3. Speak to a facilitator if you don't feel comfortable.

Session dates and times

The Community Panel will take place across six sessions throughout November 2023, February 2024 and March 2024. The sessions will be a mixture of face-to-face and online events. The dates and details are provided below.

Date and time	Time	Details	Focus
Thursday 16 Nov 2023	**6pm to 9pm**	Broadmeadow Room McDonald Jones Stadium 294 Turton Rd, Broadmeadow NSW Transport options: https://www.mcdonaldjonesstadium.com/venue-information/transport_getting_here	**Orientation event:** Develop a group dynamic where everyone feels informed, trusted and supported.
Saturday 18 Nov 2023	**9am to 5pm**	Broadmeadow Room McDonald Jones Stadium 294 Turton Rd, Broadmeadow NSW	**Day 1:** To bring all panel members to a shared understanding of the topic and task.
Saturday 3 Feb 2024	**9am to 5pm**	The Extra Room Newcastle Exhibition & Convention Centre (NEX) 309 King Street, Newcastle West NSW (corner of King Street and Union Street) Transport options: https://www.thenex.com.au/contact#location-parking	**Day 2:** To question, discuss or validate information. To deliberate and reach a group position on the first topic.
Saturday 17 Feb 2024	**9am to 5pm**	Online via Zoom **Zoom meeting link:** https://insync-au.zoom.us/j/7145004680?pwd=Nzg2aVNyT1dIL2FoTno1dkNXT2huQT09 **Meeting ID:** 714 500 4680 **Passcode:** HWC2024	**Day 3:** To deliberate and reach a group position on the second topic.

Date and time	Time	Details	Focus
Saturday 2 Mar 2024	**9am to 5pm**	Online via Zoom **Zoom meeting link:** https://insync-au.zoom.us/j/7145004680?pwd=Nzg2aVNyT1dIL2FoTno1dkNXT2huQT09 **Meeting ID:** 714 500 4680 **Passcode:** HWC2024	**Day 4:** To deliberate and reach a group position on the third topic.
Saturday 16 Mar 2024	**9am to 5pm**	The Extra Room Newcastle Exhibition & Convention Centre (NEX) 309 King Street, Newcastle West NSW (corner of King Street and Union Street)	**Day 5:** To reach a consensus on the recommendations for all three topics. To consider the cumulative bill impact of the forum's final decisions.

Session focus

Orientation event

The orientation event is about creating the conditions for the deliberative process to be successful. It is dedicated to:

- establishing group connections,
- developing 'Working Agreements',
- defining the task,
- setting out the roadmap,
- clarifying roles and responsibilities, and
- addressing cognitive biases. (A cognitive bias is a type of mental shortcut our brain uses to make decisions or judgements quickly. Sometimes these shortcuts are helpful, but other times they can lead to mistakes or unfair judgements because they're based on our past experiences, feelings, or beliefs rather than on careful thinking.)

The orientation event is pivotal to the success of the deliberative forum and the process overall.

Day 1

The first day represents the 'learning phase' of the deliberative forum. It is dedicated to:

- introducing panel members to the deliberative process,
- understanding the problem and context,
- confirming our promise to you,
- developing critical thinking skills to weigh up different viewpoints, priorities and perspectives,
- introducing the key topics and answering questions,
- 'conversation circles' to teach each other about the Engagement Report that you will receive prior to Day 1, and
- 'speed dialogue' processes to interview guest contributors and Hunter Water subject matter experts.

By the end of the learning phase, the forum will understand the problem and key topics.

Days 2, 3 and 4

The second, third and fourth days represent the 'exploration phase' of the deliberative forum. They are dedicated to:

- answering all questions carried over from Days 1 and 2,
- on Day 2 we will discuss the existing commitments that Hunter Water has made to secure our water supply into the future, the costs of which will be passed on to customers,
- on Day 2 we will also discuss factors outside our control that affect future prices and bills, and actions that we are taking to keep bills as low as possible, like making savings,
- 'speed dialogue' processes to interview internal and external subject matter experts,
- identifying missing information and closing the gaps, and
- small group decision-making to agree to the draft recommendations on key topics.

By the end of the exploration phase, the forum will have a draft set of recommendations on the key topics.

Day 5

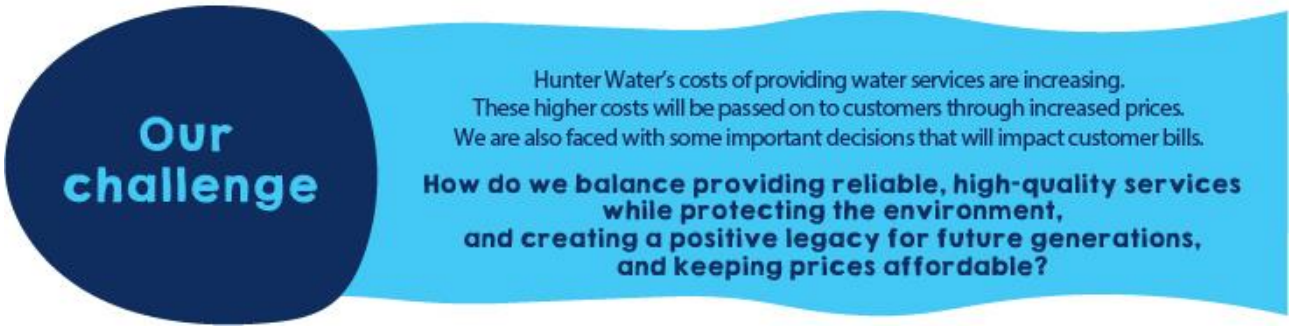
The final day represents the 'consensus phase' of the deliberative forum. It is dedicated to:

- small group decision-making to agree to the draft recommendations on each topic,
- considering trade-offs (i.e., the balance between different services and the cumulative bill impacts),
- large group decision-making to agree on the revised recommendations on each topic, and
- receiving feedback from Hunter Water and refining recommendations on each topic.

By the end of the consensus phase, the forum will have a clear set of recommendations for Hunter Water to incorporate in its price proposal to the maximum extent possible.

Scope

The forum will consider feedback from the broader customer and community engagement, as well as a range of background information, and will respond to the question:



What you can influence

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 price 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 you can't influence

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 *Constitution Act (NSW) 1902*).	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: • 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.

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.

Working online

Technical support will be provided to ensure everyone can participate, even if you are not very experienced at working online.

The basic requirements for using Zoom are:

- an internet connection of at least 5 mbps speed for uploading and downloading. To test your connection speed, visit: www.speedtest.net
- a desktop or laptop computer (not a smart phone or tablet)
- headphones / camera / microphone
- a quiet space without interruptions.

Technical support

If you don't have a computer or internet access at home, Hunter Water and Insync will arrange a way for you to participate. Please contact Jane Tyquin jtyquin@insync.com.au if you think you might need additional assistance to participate online.

Insync can also provide support before the online sessions begin to check that your laptop or computer is working to the standard it needs to. It may be helpful to ask someone in your home to help you with the tech-checks if you need assistance.

If you would like to check your connection and test the basics of using Zoom, please book one of the sessions below by sending an email with your preferred time to jtyquin@insync.com.au

During the tech support session, you will get help to do the basics on Zoom, including:

- turning your microphone on and off (mute),
- turning your video on and off,
- using the 'chat' function,
- sharing your screen, and
- changing between gallery and speaker view.

Technical support dates:

Please book by sending an email to jtyquin@insync.com.au

Date	Time	Zoom meeting details
Monday, 13 November 2023	6:00pm-6:30pm	**Meeting link:** https://insync-au.zoom.us/j/7145004680?pwd=Nzg2aVNyT1dIL2FoTno1dkNXT2huQT09 **Meeting ID:** 714 500 4680 **Passcode:** HWC2024
Tuesday, 14 November 2023	5:00pm-5:30pm	
Wednesday, 14 February 2024	6:00pm-6:30pm	
Thursday, 15 February 2024	5:00pm-5:30pm	

Guidelines for working together on Zoom

We will be providing more instructions and support to make sure that you have a good online experience. For now, consider these guidelines to ensure that you are ready to join us for the first session on Zoom:

- find a quiet space to participate in the meeting (but not in bed, and certainly not in your bathroom!),
- try to have light on your face so that others can see your expression,
- join the meeting a few minutes early to resolve any technical issues,
- avoid multi-tasking (doing other work) during the sessions,
- mute your microphone when not talking,
- position your camera close to the screen you're looking at,
- keep your camera on whenever possible,
- turn off your camera briefly if doing something distracting,
- raise your virtual "hand" and/or speak up if you have something to say, and
- use the "chat" function to record key ideas or thoughts that might come to mind while others are speaking.

Facebook group

We have set up a private Facebook group for members of the deliberative forum where all supporting information, background materials and online discussion forums will be available.

Hunter Water will issue an invitation to panel members containing instructions on how to access the private Facebook group.

This email will be sent soon after the orientation event on 16 November 2023. Please contact pricing.engagement@hunterwater.com.au if you experience any issues trying to join the group.

Payments

The Community Panel will meet across six sessions in total (approximately 43 hours total commitment) during outside of business hours and make a significant commitment in representing their community.

Panel members who attend all six sessions will receive $935 as recognition of costs associated with attendance and in gratitude for their commitment to Hunter Water.

Payment will be provided to members at the conclusion of the final session in March 2024.

Media and social media guidelines

The Hunter Water Community Panel will be an open and transparent process.

We will post highlights of each forum session on our website and to our social media channels. We will be taking photos and videos at the in-person sessions and using these in our corporate publications, website and social media channels. By agreeing to participate, we will assume that you agree to be photographed and we'll be providing you with photo release forms for you to sign at the orientation event. This is not a requirement of participation, so if you would prefer not to be photographed, let us know at the orientation event and we will advise our photographers.

Panel members are welcome to post on social media about their participation. However, please respect the privacy of fellow Community Panel members, guest contributors, Hunter Water and Insync.

If you use social media (Facebook, Instagram, Twitter (now known as X) etc.) to post about your experiences during the process, we encourage you to use the hashtag: #HWCommunityPanel

Anything said to a journalist, submitted to a media organisation or posted online on social media is a public comment. Please be polite and respectful of others and their opinions, don't reference specific individuals, and only speak from your perspective – not on behalf of the group. If you are posting photographs, please ensure that you have sought permission from any participant depicted.

If you need help handling an enquiry from the media, or need to refer an enquiry to Hunter Water, please contact the media team at media@hunterwater.com.au or by calling 02 4979 9669.

The facilitation team

Insync's role is to support the panel members and to guide the process in a way that helps you to perform your tasks as effectively as possible.

The **Insync** team includes Tony Matthews, Emily Harrison, Jane Tyquin and James Garriock.

For more information on Insync, please visit https://insync.com.au/about-us/

Tony Matthews

Lead Facilitator

Emily Dimmack

Support Facilitator

Jane Tyquin

Moderator

James Garriock

Engagement Subject Matter Expert

Observers

Having observers in attendance helps to build understanding and enhance the transparency of the process.

Observers are provided with a set of rules that govern their behaviour and can't disturb panel members or disrupt the process.

The known observers at this stage will be Hunter Water employees, Executive and Board members, the project team, senior decision makers, members of the Customer Engagement Advisory Panel and Independent Pricing and Regulatory Tribunal employees.

Our Board

Our Board of Directors oversees our organisation's policies, management and performance. The Board sets our strategic direction, and ensures we achieve our business and regulatory commitments.

The Board needs to make sure that our price proposal provides the best value to customers and reflects what we've heard from customers and the community.

Hunter Water's Board of Directors are Greg Martin (Chair), Darren Cleary (Managing Director/Chief Executive Officer), Rod Harrison, Michelle Vanzella, Geoff Crowe, Eric De Rooy, Julie Savet Ward, and Donna-Maree Vinci.

Greg Martin

Chair

Darren Cleary

Managing Director

Customer Engagement Advisory Panel

We formed an independent forum of experts to constructively challenge us on how we listen to and learn from our customer and community in developing our price proposal.

Robert Ryan

Chair

Brad Webb

Douglas McCloskey

Ruth Lavery

Richard Anicich

Key Contacts

RSVPs / Attendance / General Enquiries:

Please direct correspondence regarding attendance and general enquiries through to: jtyquin@insync.com.au

Payments:

Deliberately Engaging will ask for your bank details to make payment at the conclusion of the Community Panel.

Facebook group access and technical issues:

Pricing.engagement@hunterwater.com.au and/or jtyquin@insync.com.au

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

Contents

Contents

Contents

PART ONE

Introduction

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

About us

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.

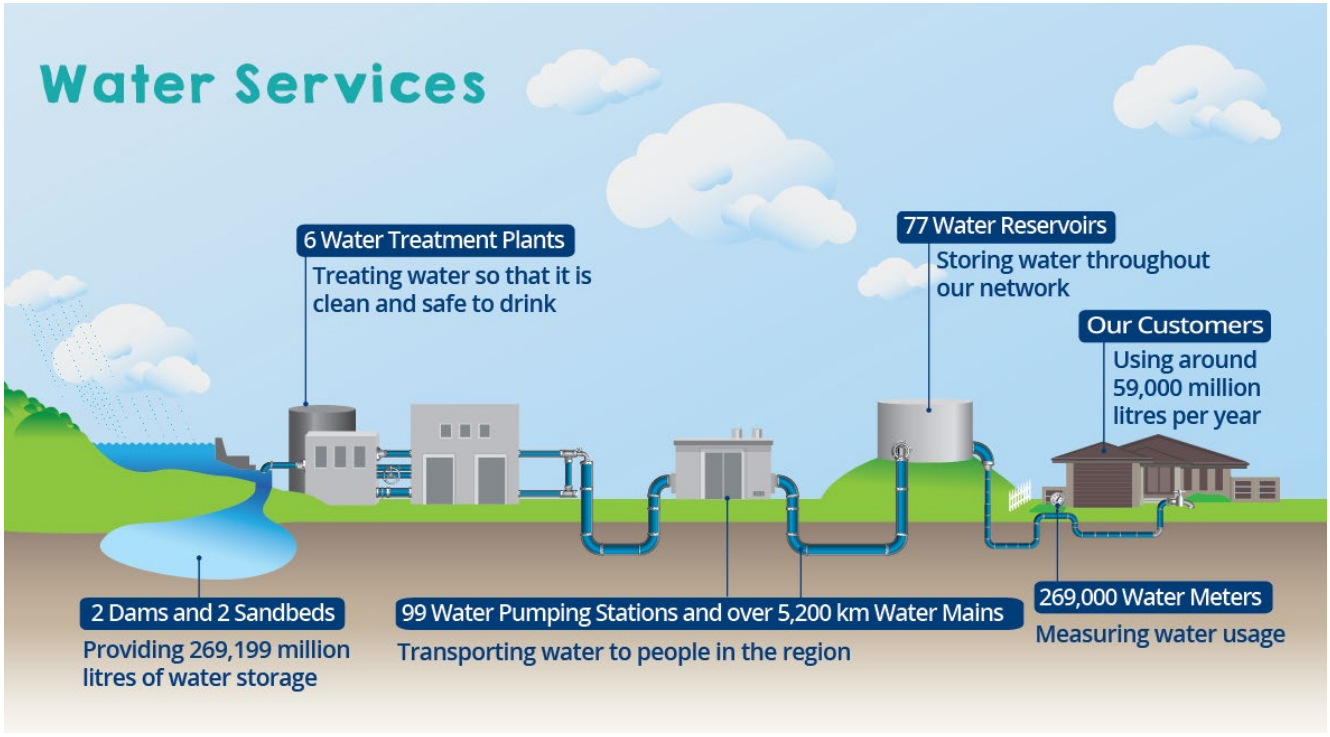
We are a vertically integrated water utility – an operator and retailer from catchment to tap, sink to waterway. Our main responsibility is to supply reliable, high quality water and wastewater services. We also provide some stormwater, trade wastewater, recycled water and raw water services.

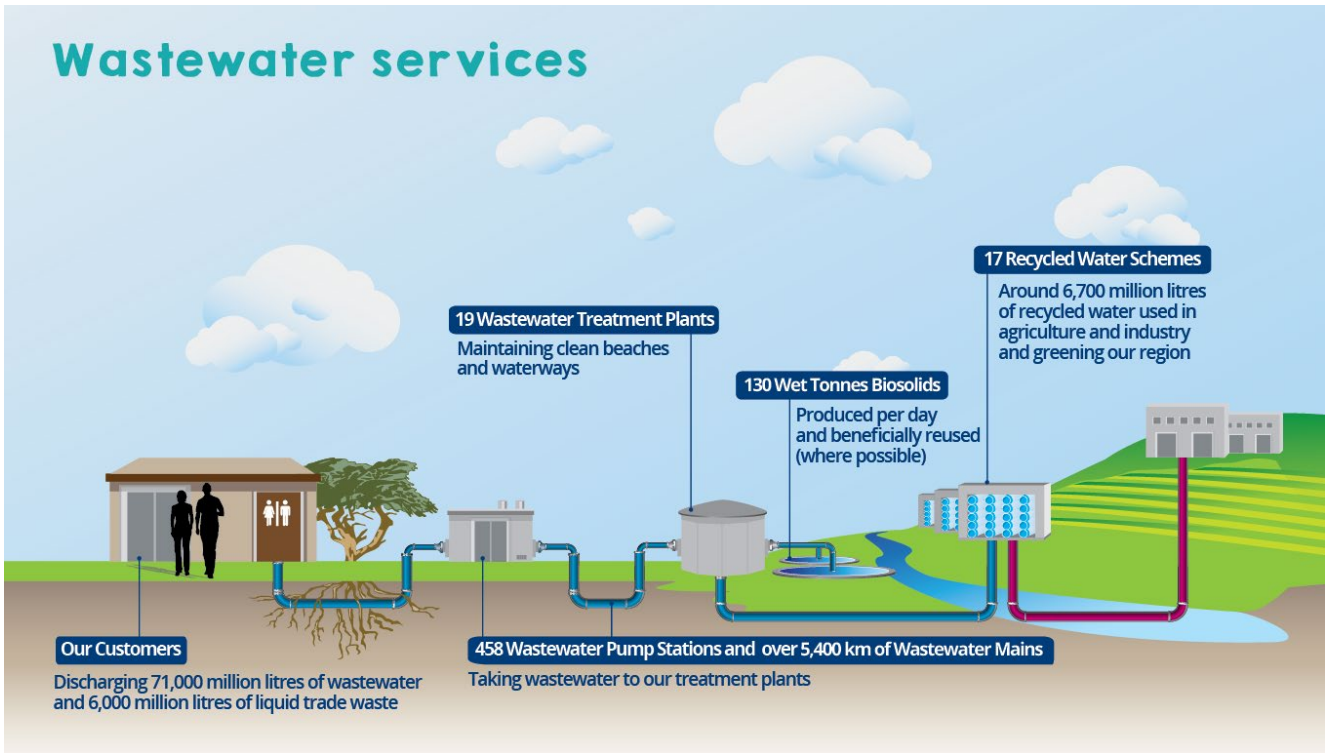
We provide stormwater services to almost 75,000 properties, which is about one third of our water and wastewater customers. Stormwater is rainwater that runs off buildings and land. Stormwater is carried in stormwater channels and discharges directly into creeks, rivers, the harbour and the ocean.

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
6 Water Treatment Plants
Treating water so that it is clean and safe to drink
77 Water Reservoirs
Storing water throughout our network
Our Customers
Using around 59,000 million litres per year
2 Dams and 2 Sandbeds
Providing 269,199 million litres of water storage
99 Water Pumping Stations and over 5,200 km Water Mains
Transporting water to people in the region
269,000 Water Meters
Measuring water usage


Wastewater services
17 Recycled Water Schemes
Around 6,700 million litres of recycled water used in agriculture and industry and greening our region
19 Wastewater Treatment Plants
Maintaining clean beaches and waterways
130 Wet Tonnes Biosolids
Produced per day and beneficially reused (where possible)
Our Customers
Discharging 71,000 million litres of wastewater and 6,000 million litres of liquid trade waste
458 Wastewater Pump Stations and over 5,400 km of Wastewater Mains
Taking wastewater to our treatment plants

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.

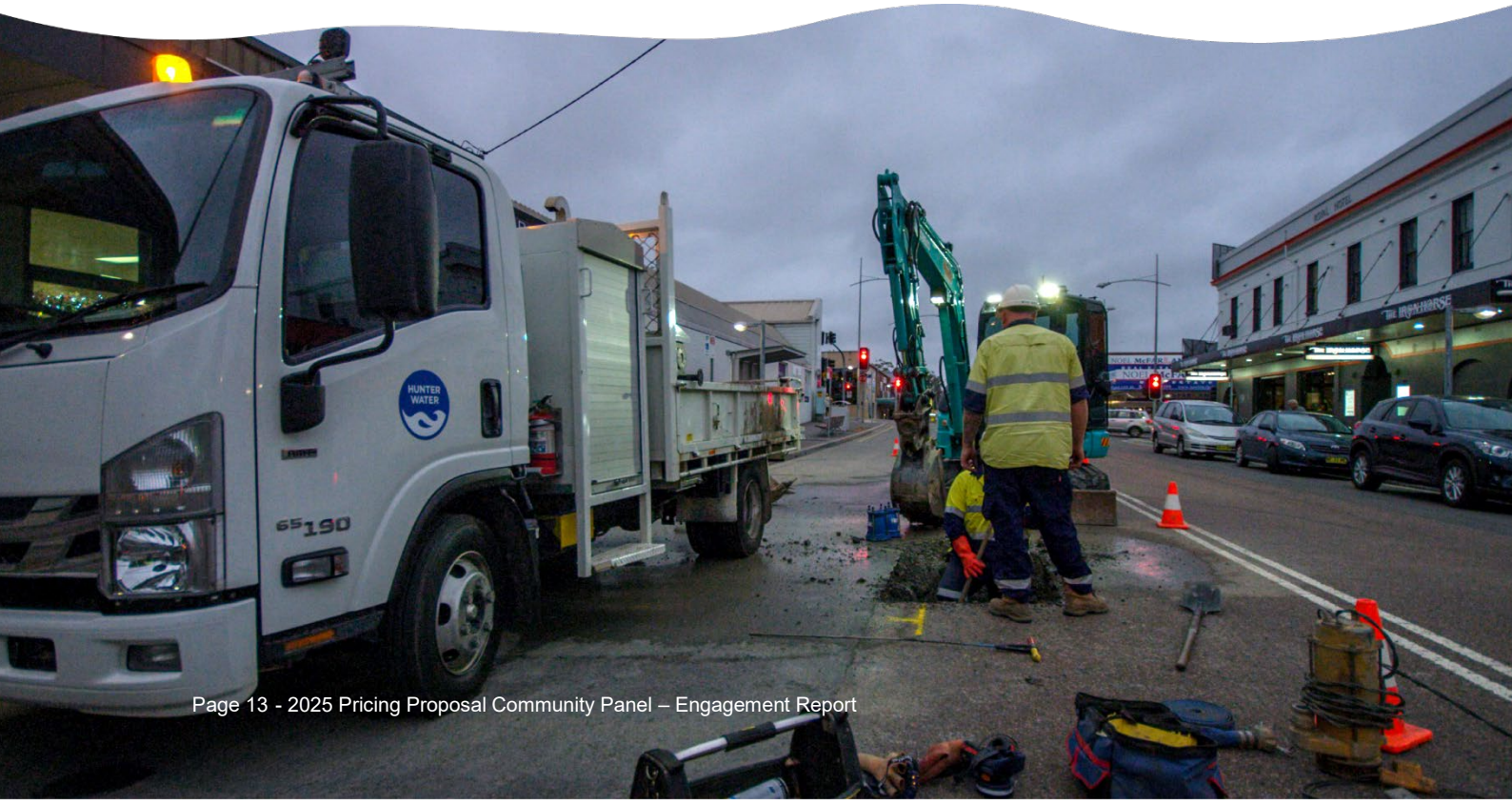
We operate within a comprehensive regulatory framework that includes regulation under various state and federal legislation and guidelines, which are administered by various government agencies. Regulations and regulators are in place to protect public health and safety, consumers, and the environment 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 or 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.

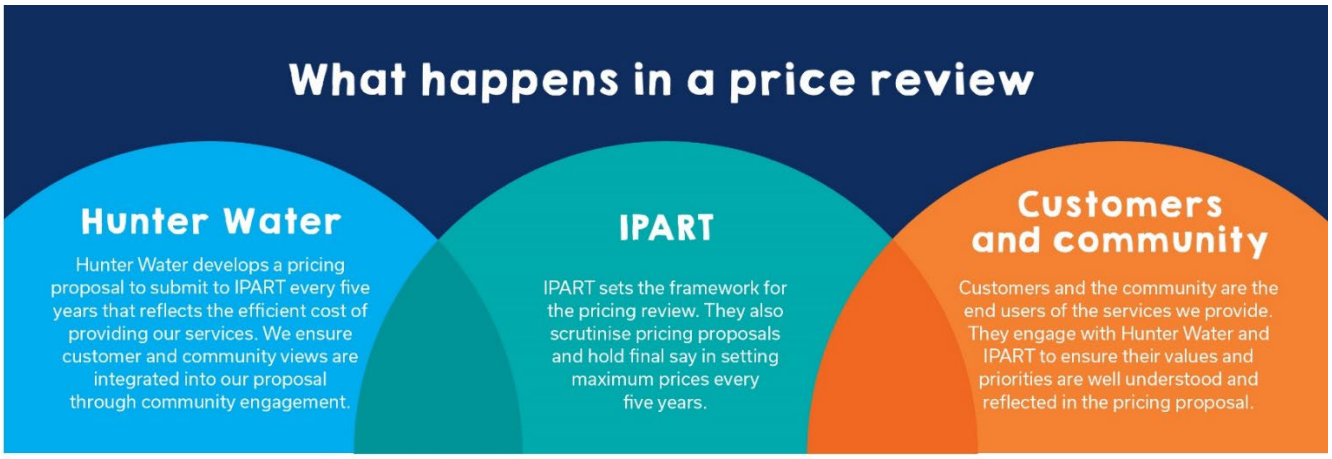
What is a pricing proposal?

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.

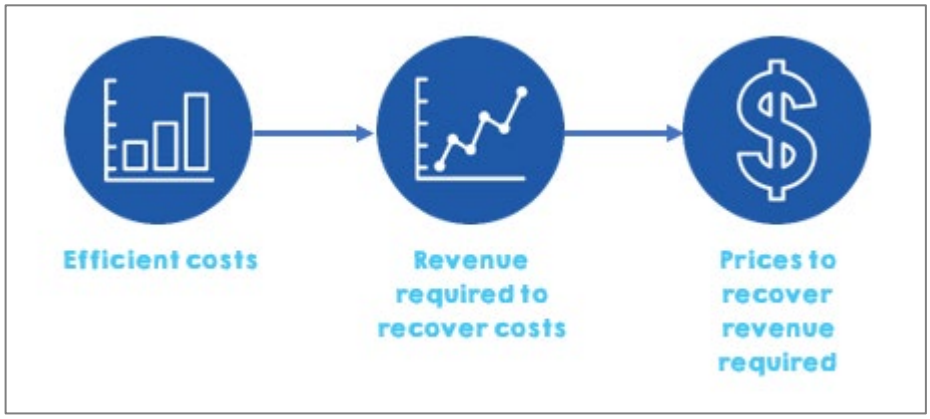
Before making its decisions, IPART conducts transparent, impartial reviews. IPART (the Tribunal) is made up of three permanent members. The Tribunal is advised by a Secretariat consisting of highly experienced economists, financial analysts, lawyers, engineers, and other professionals. IPART can also 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% x $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 1/100th 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 1/100th 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.

Understanding prices and charges

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

Operating costs Fast money	Capital costs Slow money
	
Impacts customer bills quickly	Impacts customer bills slowly but affect bills for a long time Affected by the WACC, which is like the interest rate on a home loan (mortgage)

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.

Understanding prices and charges

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.

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

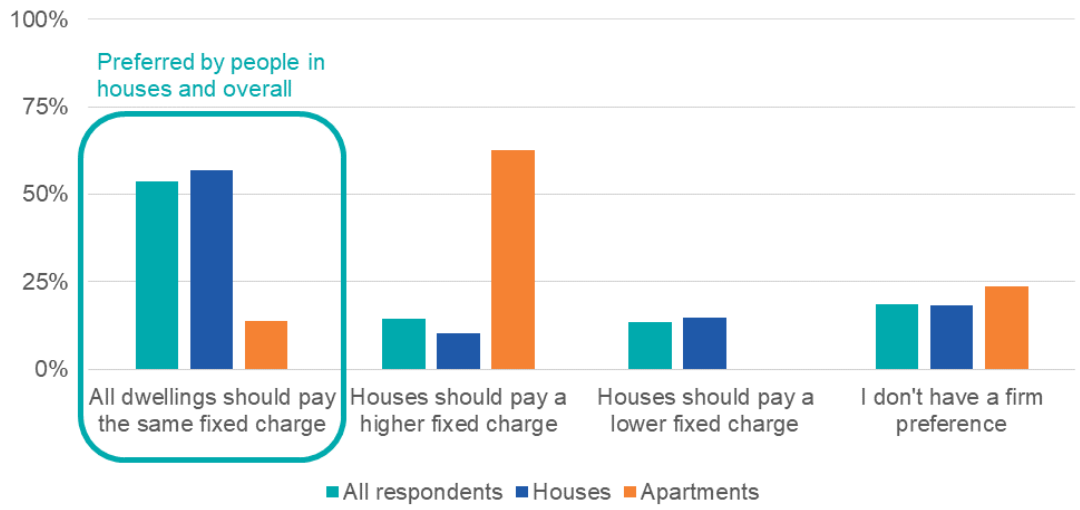
Wastewater service charges are made up of two parts - a fixed part based on the water meter and an allowance for discharge of up to 120 kL per year. Customers in houses currently pay more than customers in individual flats (or apartments). We are slowly adjusting these prices to match.

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.

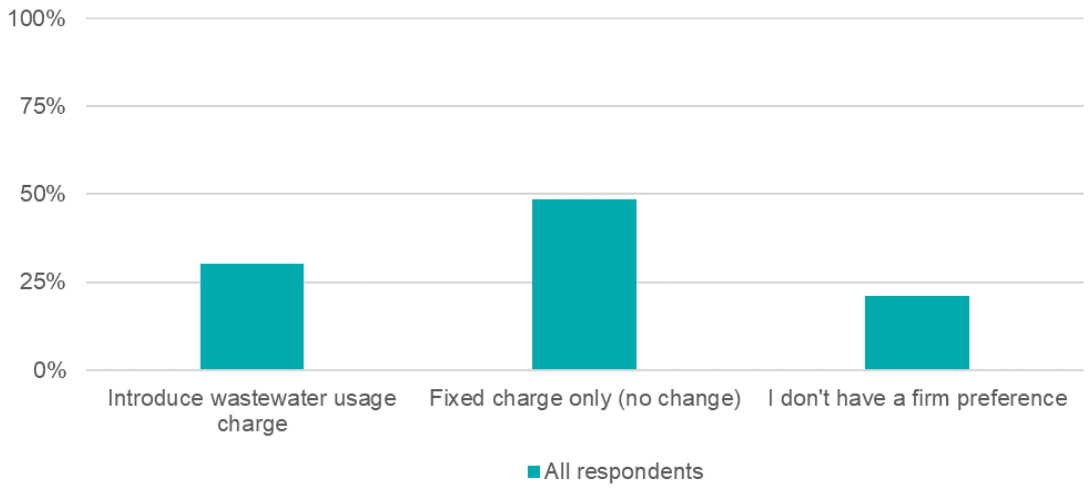
We have previously asked our residential customers whether the fixed component of a wastewater bill should be the same for all residential customers (for both the owners of houses and apartments). Not surprisingly, customers in a house preferred a common charge, around 80% of wastewater residential customers. 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



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.

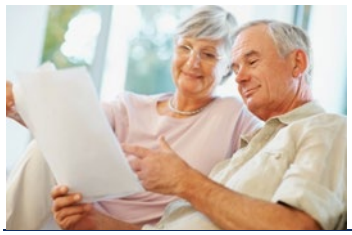
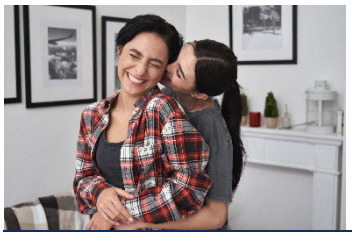
Hunter Water has over 5,000 kilometres of wastewater pipes connecting customers to treatment plants. Stretched end-to-end, this underground, and unseen, network would run from Newcastle to Perth and back to Kalgoorlie. The wastewater pipe network requires ongoing maintenance, repair and renewal. As the 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.

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** $822	**$242** $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** $1,171	**$378** $390
Medium household	 Household of three or four people who own their own home and have average water use (180kL per year)		**$1,337** $1,434	**$446** $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** $1,752	**$552** $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.

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.

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 I 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.

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)

"*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?

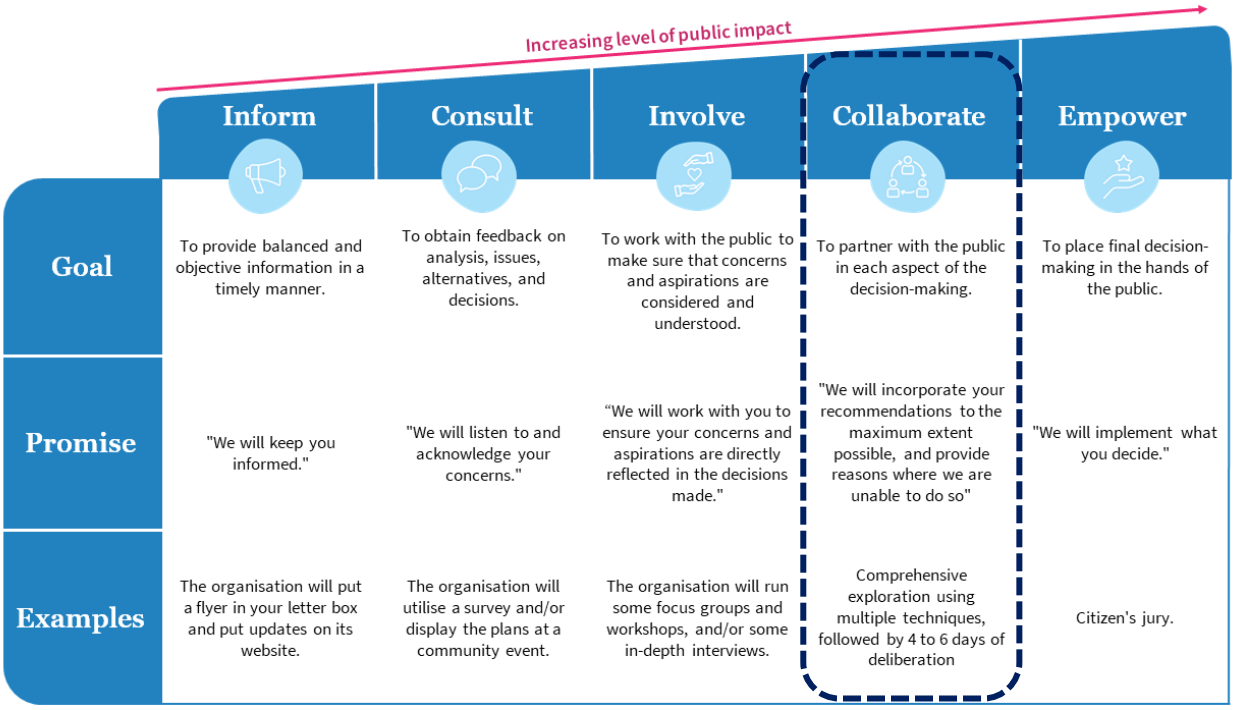
How much of a say are you being given in this Community Panel?

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



Your role

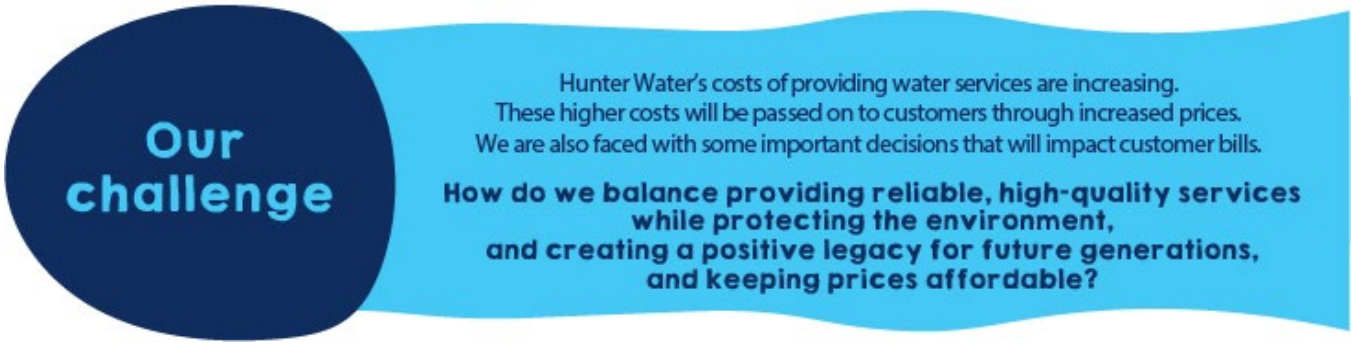
Your role as a panel member includes both listening and contributing. As a panel member you will:

- 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 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 *Constitution Act (NSW) 1902*).	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: • 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


Post-it
3M
Recycled Water (sewage)
Pro
- Cheap Cost p/L is lower
- Reduced consumption of drinking water
- Reliable
Con
- Cost a lot high
- Risk of contamination
- Stigma
to public
Conservation of water
- Public is actively involved
3

Context on the topics

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:

Hot spots

- 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?

Our challenge of protecting the environment:

Carbon reduction

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?

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

Topic 1: Hot spots

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:

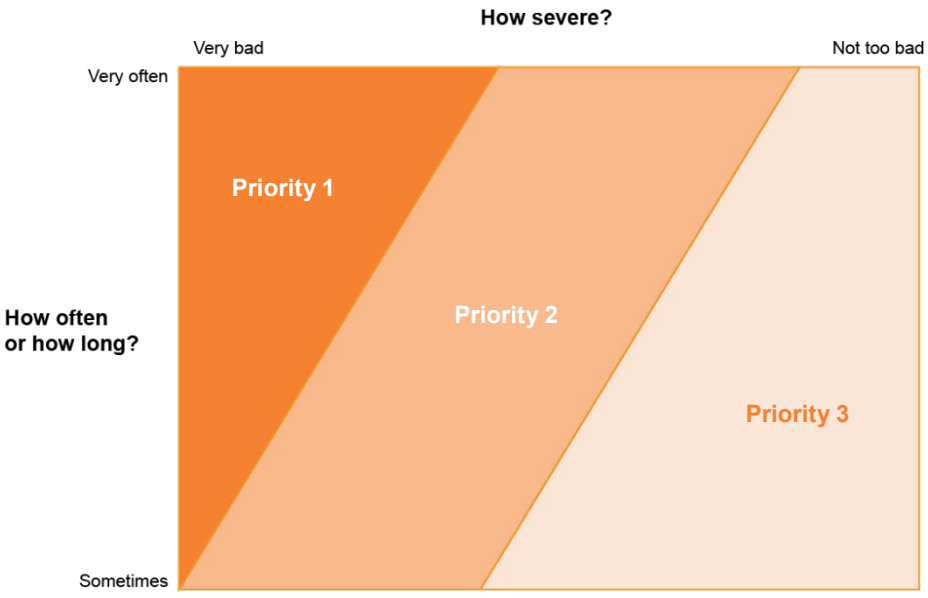
- NSW Government regulations generally set service performance standards around the maximum number of customers that can experience a service problem in a year. Therefore, if we don't exceed that maximum number, there is no regulatory requirement to fix the problems.
- it is difficult to work out who, 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.



Topic 1: Hot spots

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.

Topic 1: Hot spots

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.

Topic 1: Hot spots

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 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"?

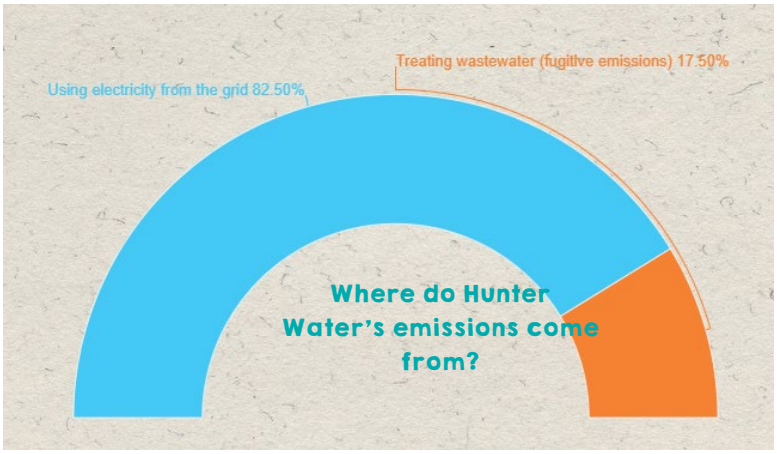
Note: These questions have been carefully designed to avoid framing or starting point bias but please employ your critical thinking skills nonetheless.

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.

Topic 2: Carbon reduction

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.

Topic 3: Conserving water

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)

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.

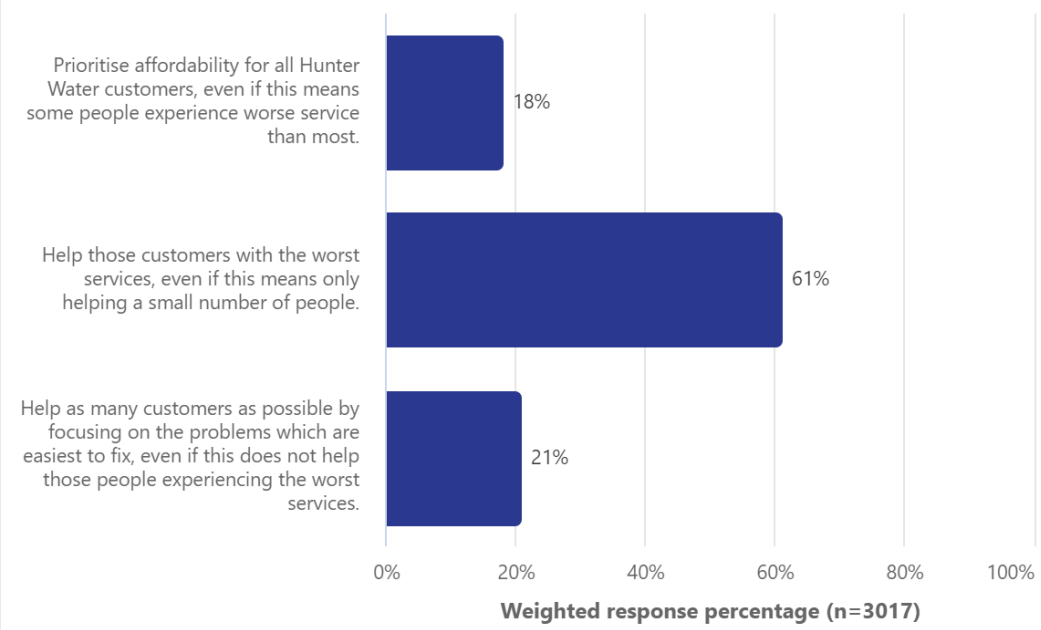
Fairness

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.

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

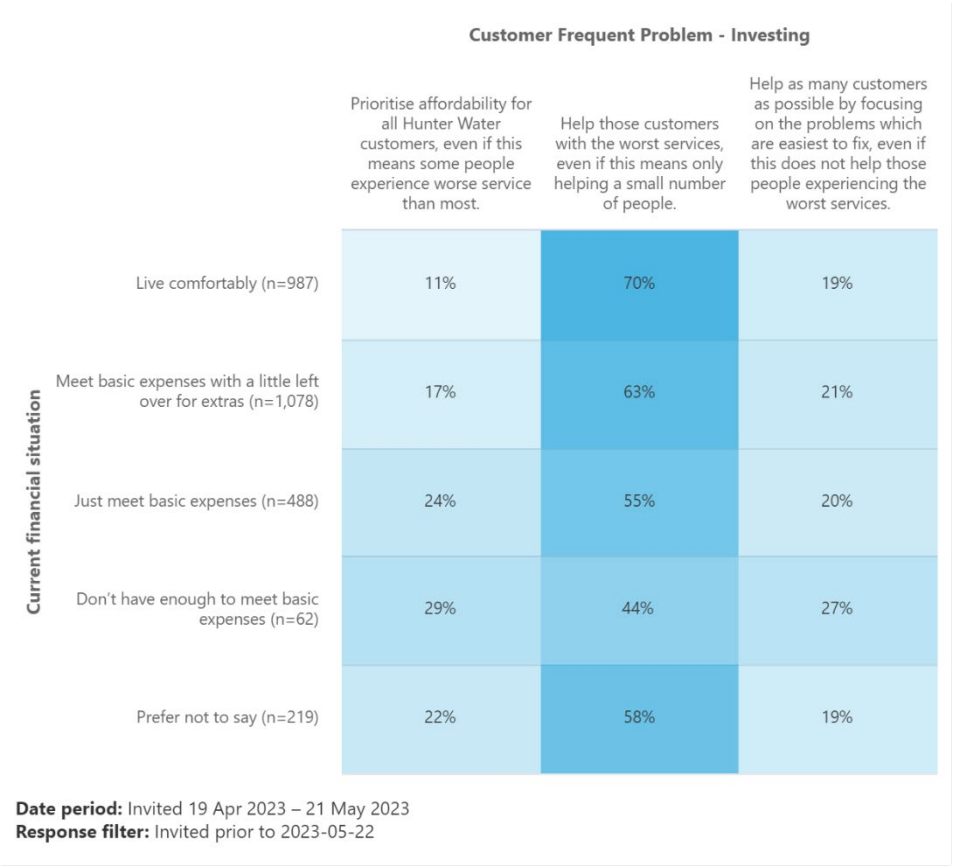


Figure A.2 shows that people having trouble making ends meet are far more likely to prioritise affordability, and less likely to suggest that Hunter Water help the worst affected customers.

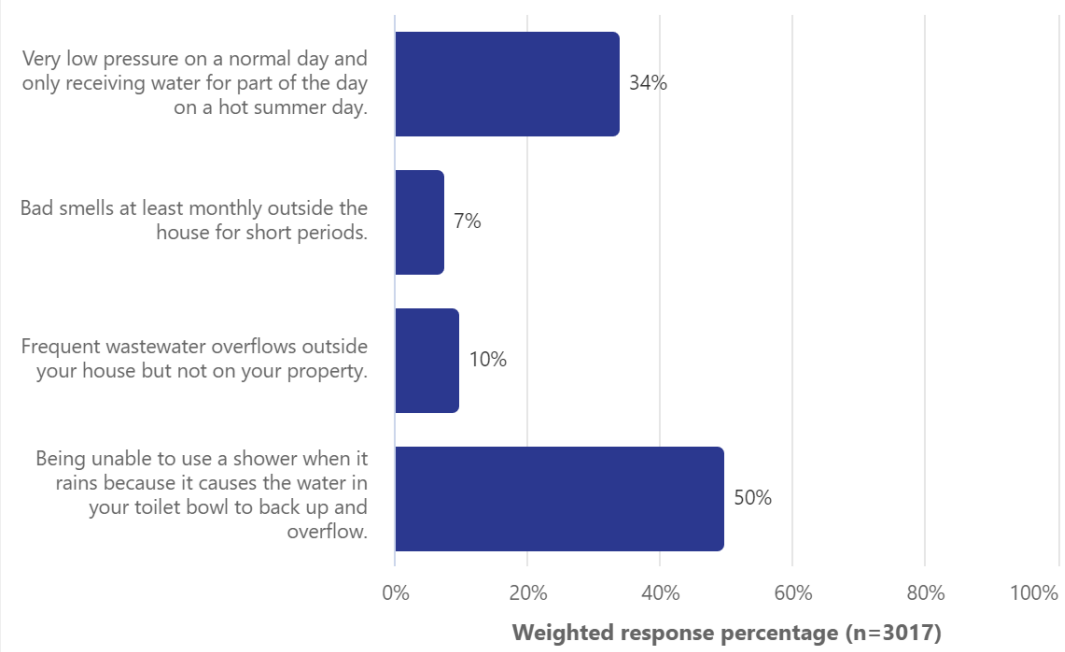
If you're interested in the other demographic splits, keep in mind that you can review all the survey results yourself using the login details in the methodology section.

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

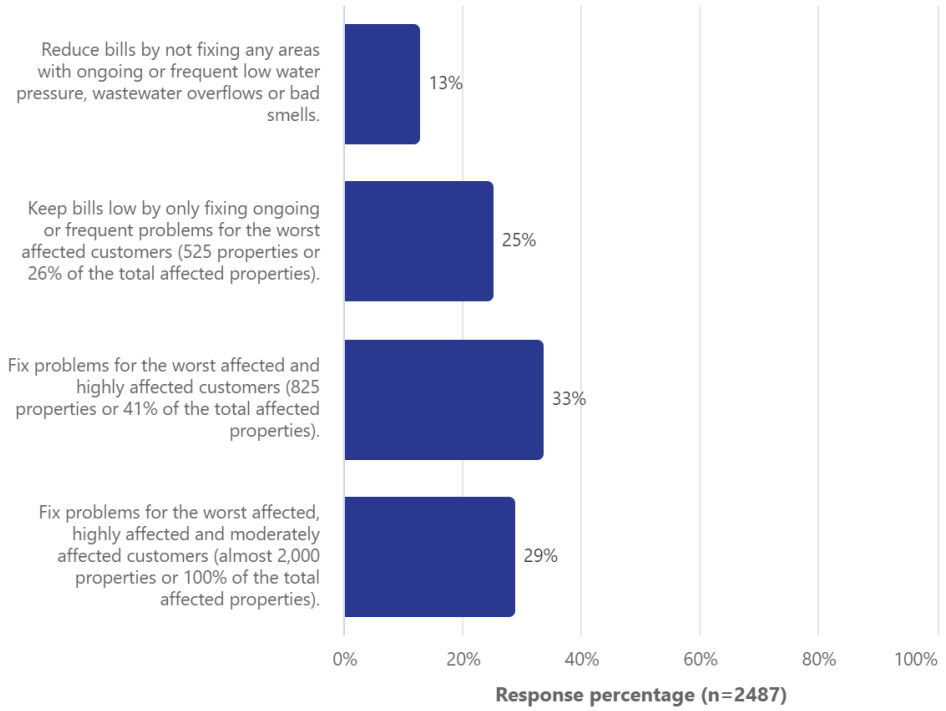
Daniel Kahnemann (and others) have shown that people tend to overestimate how a future, hypothetical event will change their happiness. This is called the "focusing illusion". Applied to this question, it means that if we focus on a persistent odour, low pressure, or a sewer spill, we are likely to overestimate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

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?



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 we make to provide more people with the high quality, reliable services that most customers already enjoy?
Date period: Invited 19 Apr 2023 – 21 May 2023
Response filter: Invited prior to 2023-05-22

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."

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

"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."

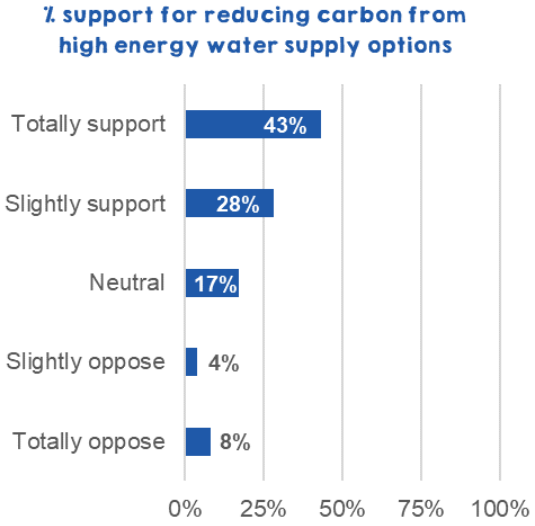
B. Research findings: carbon reduction

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.



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 CO_2e 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

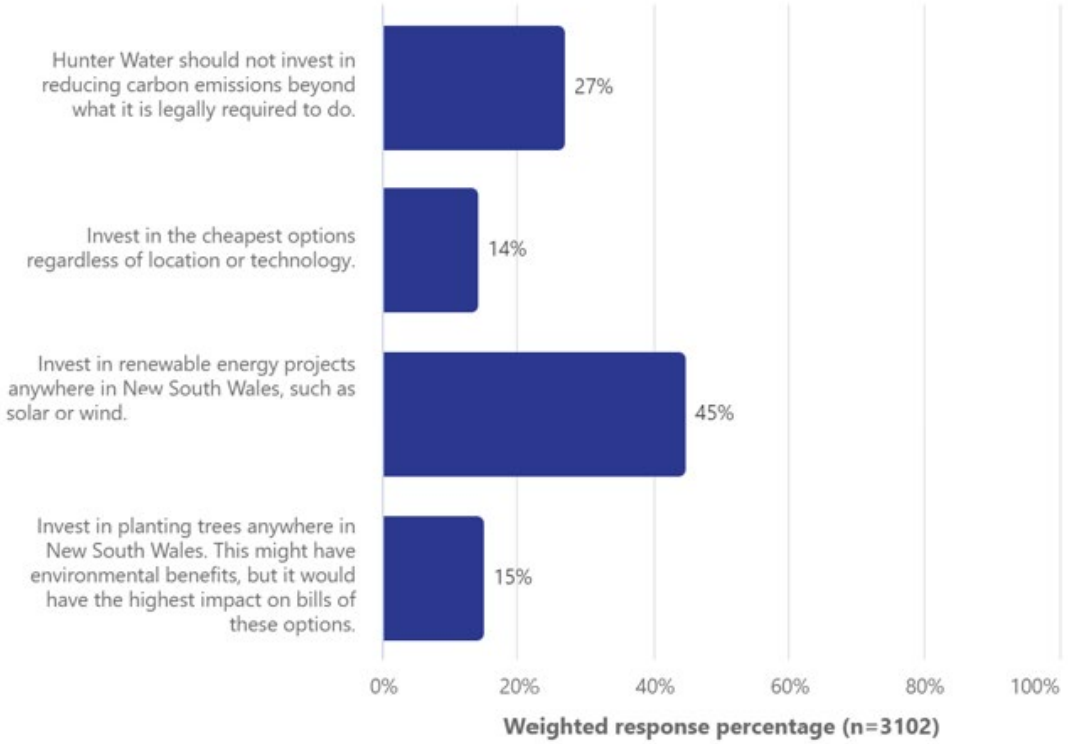
How would customers like to see this topic addressed?

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)

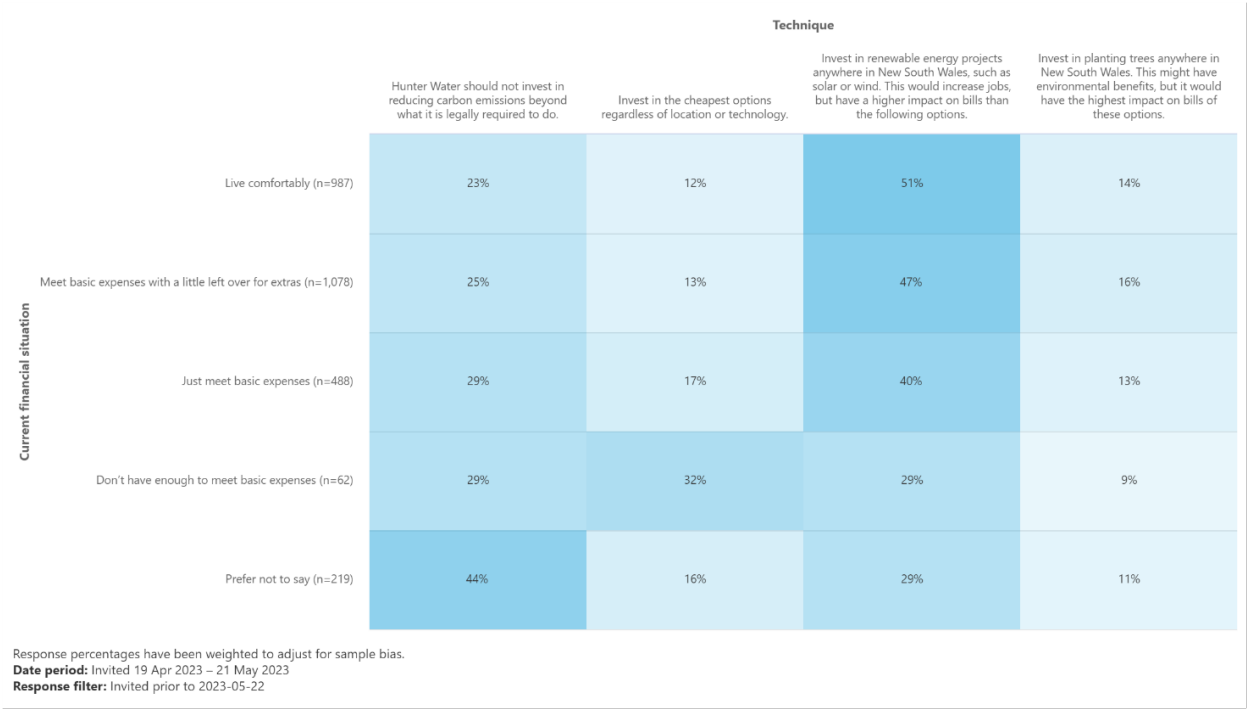


Response percentages have been weighted to adjust for sample bias.
Which techniques for reducing carbon emissions should we prioritise? (pick one)
Date period: Invited 19 Apr 2023 – 21 May 2023
Response filter: Invited prior to 2023-05-22

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.

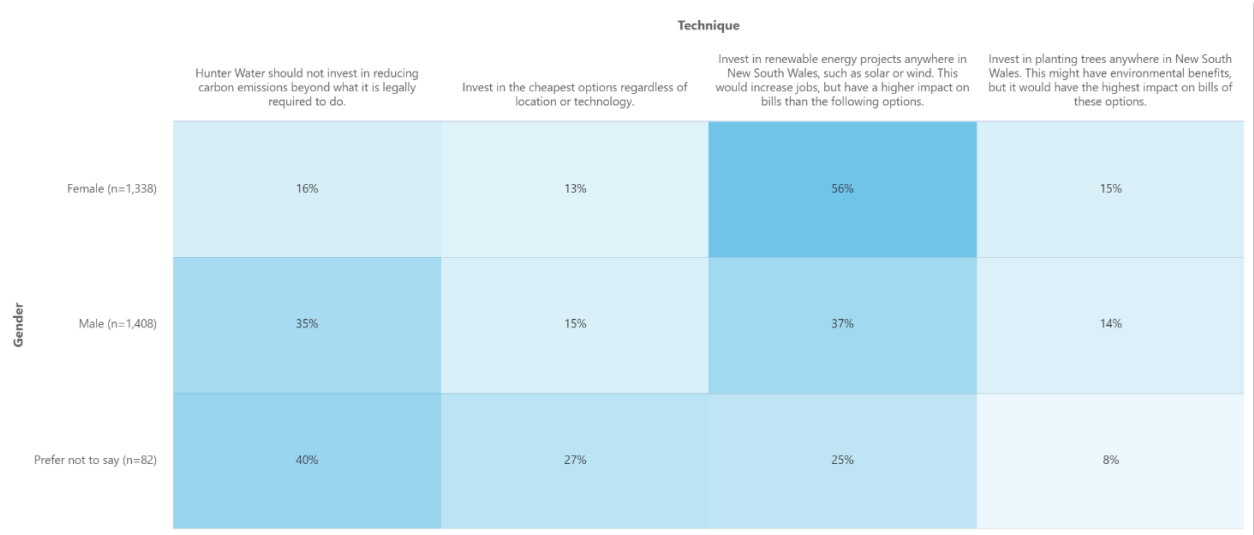
Figure B.2 – Priorities survey result on carbon reduction – breakdown by current financial situation



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

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



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

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

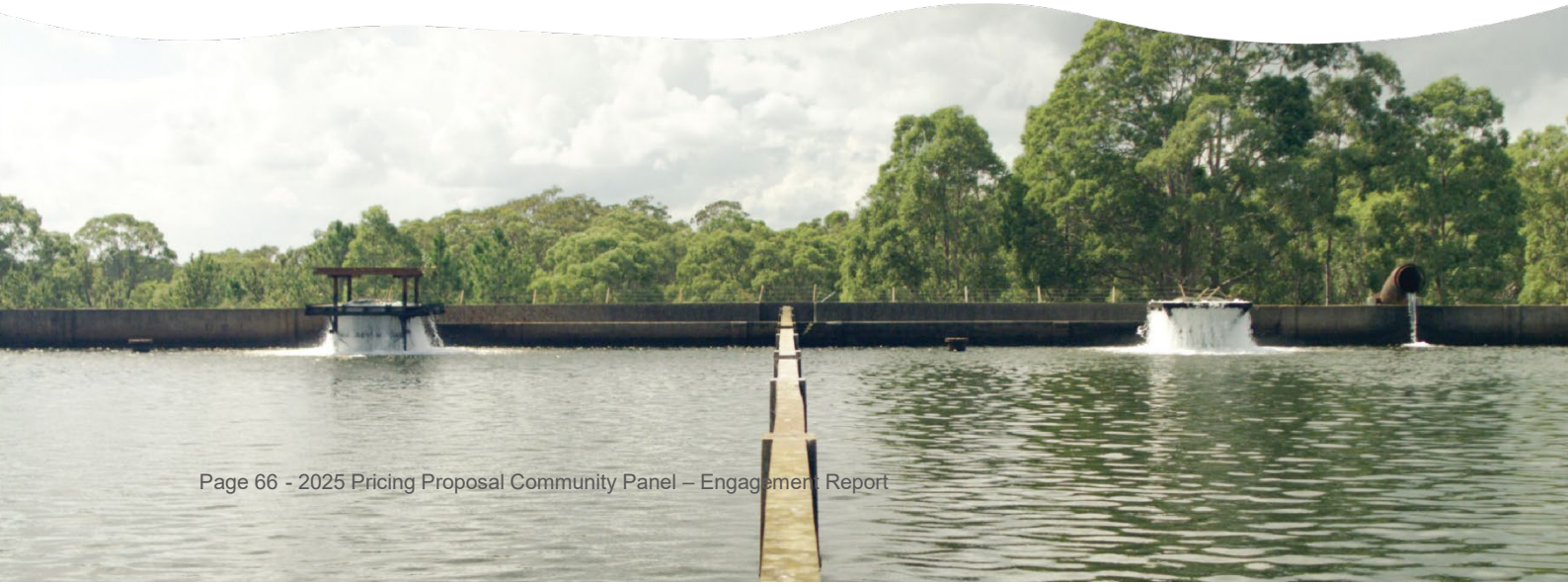
B. Research findings: carbon reduction

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?

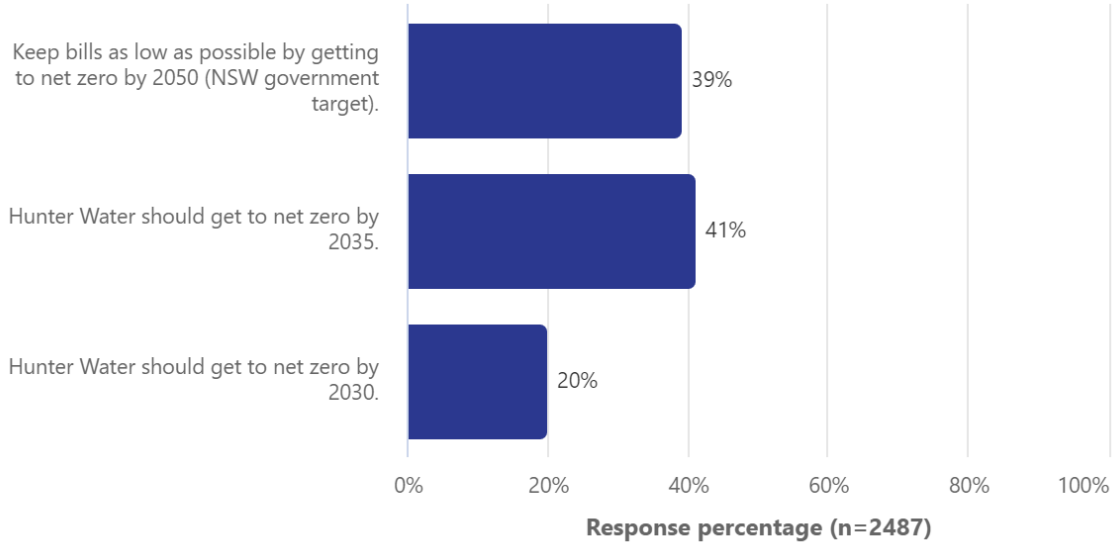
Bill Simulator results

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.

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

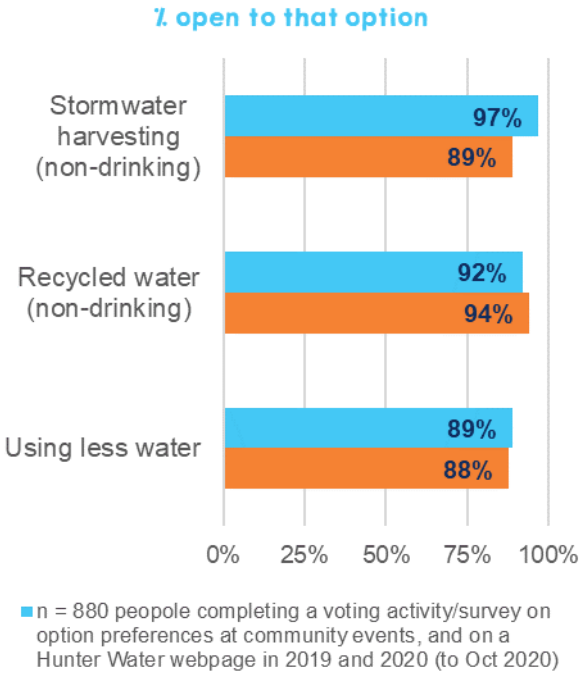
Customer and community views to 2022

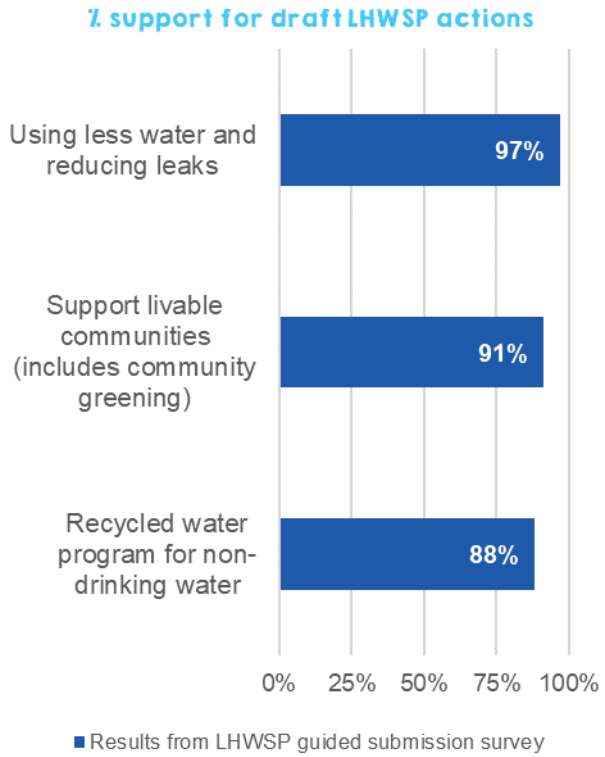
The Lower Hunter Water Security Plan (LHWSP) charts a course to significantly improve water security in our region by both reducing drinking water consumption and increasing access to new water sources (see Chapter 5, page 26).

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.

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.

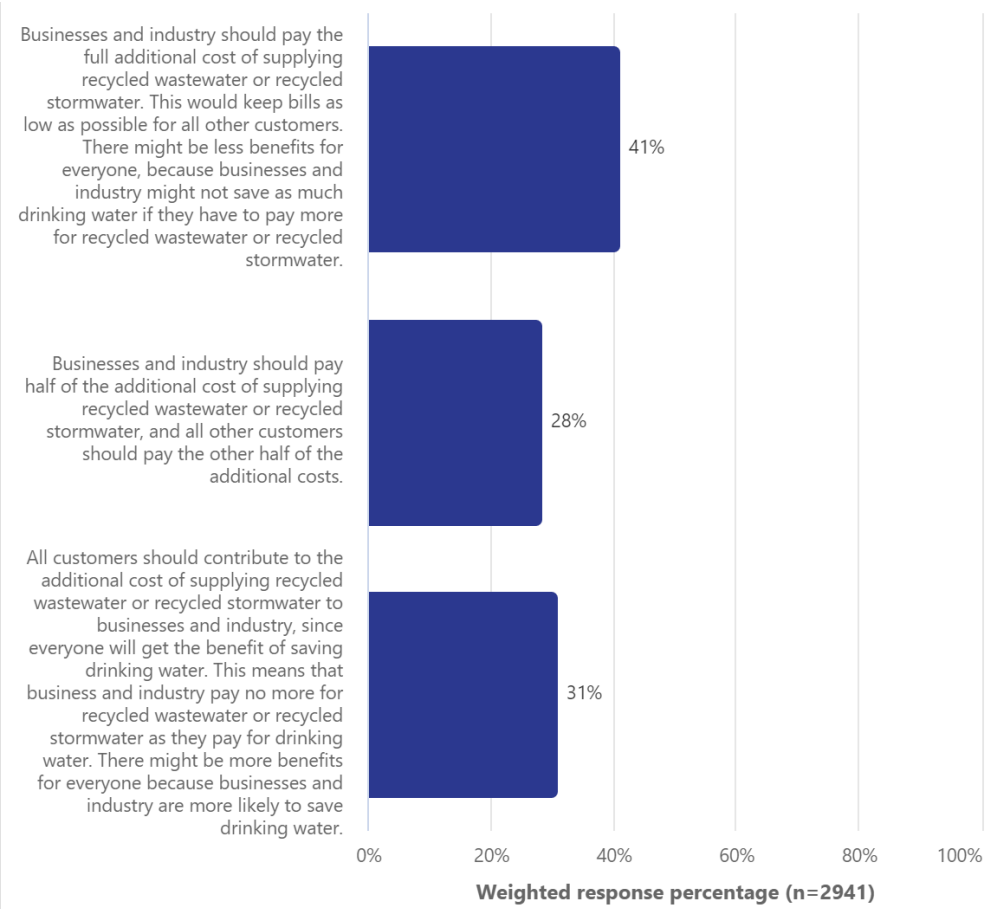
> "Customers should be shown the business case including a co-payment that Hunter Water decides on prior. For example, Hunter Water might realise that industry isn't prepared to pay full cost reflective pricing, so there's no point asking customers how much the subsidy should be. Hunter Water should 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.

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



Response percentages have been weighted to adjust for sample bias.
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

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%

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:

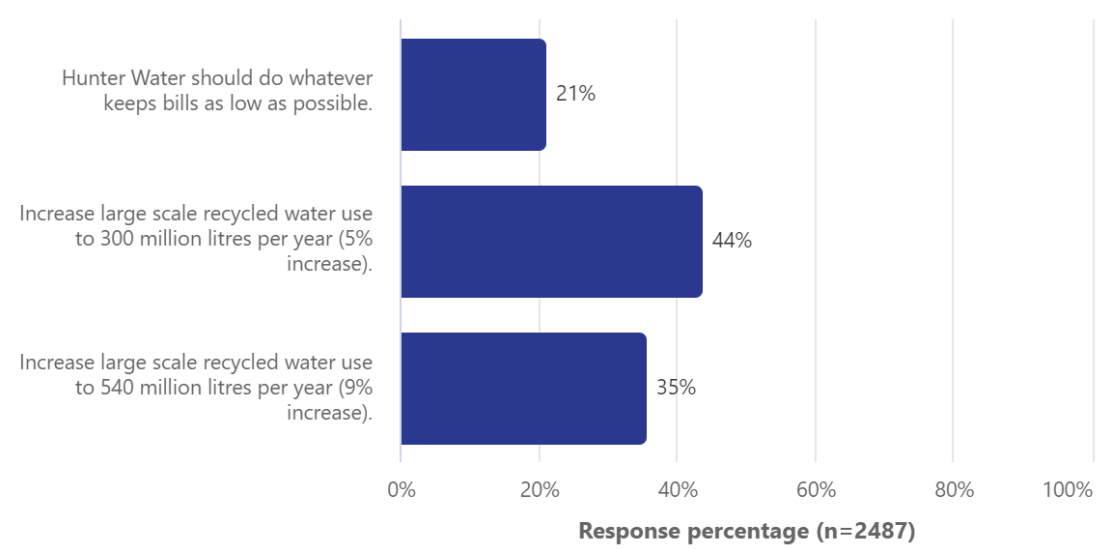
1. Hunter Water should do whatever keeps bills as low as possible
2. Increase large scale recycled water use to 300 million litres per year (5% increase)
3. Increase large scale recycled water use to 540 million litres per year (9% increase)

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.

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.

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."

Recycled wastewater or stormwater for community greening

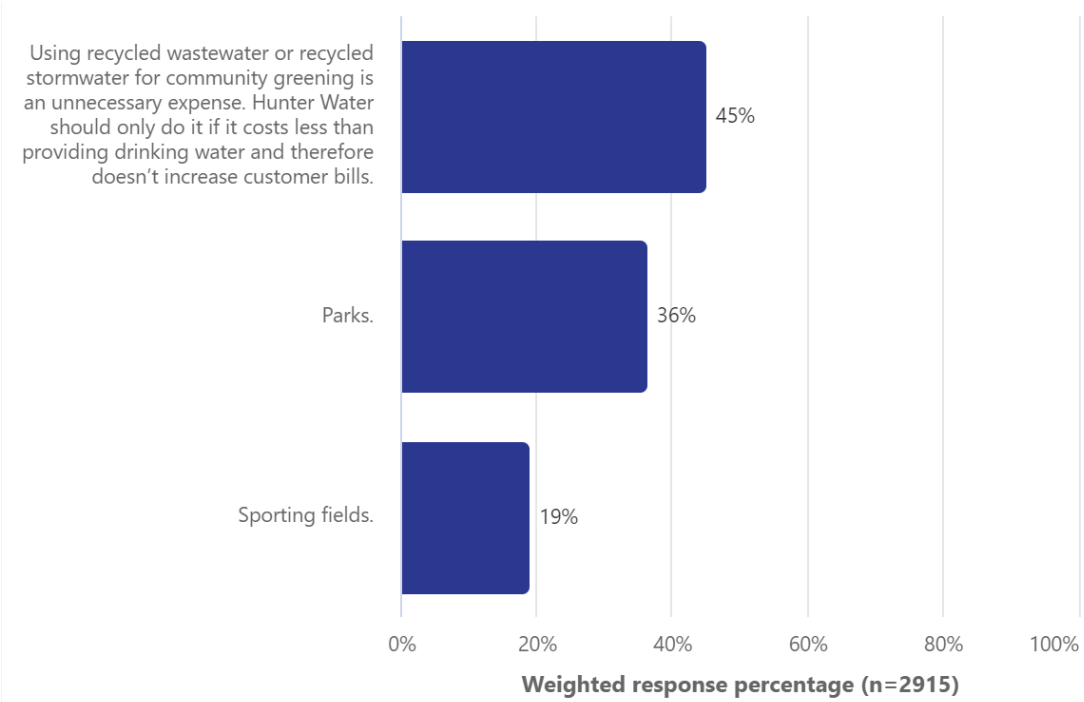
About half of customers (49%) said that they expect Hunter Water to "work with local councils to provide greener and cooler public spaces for recreation".

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.

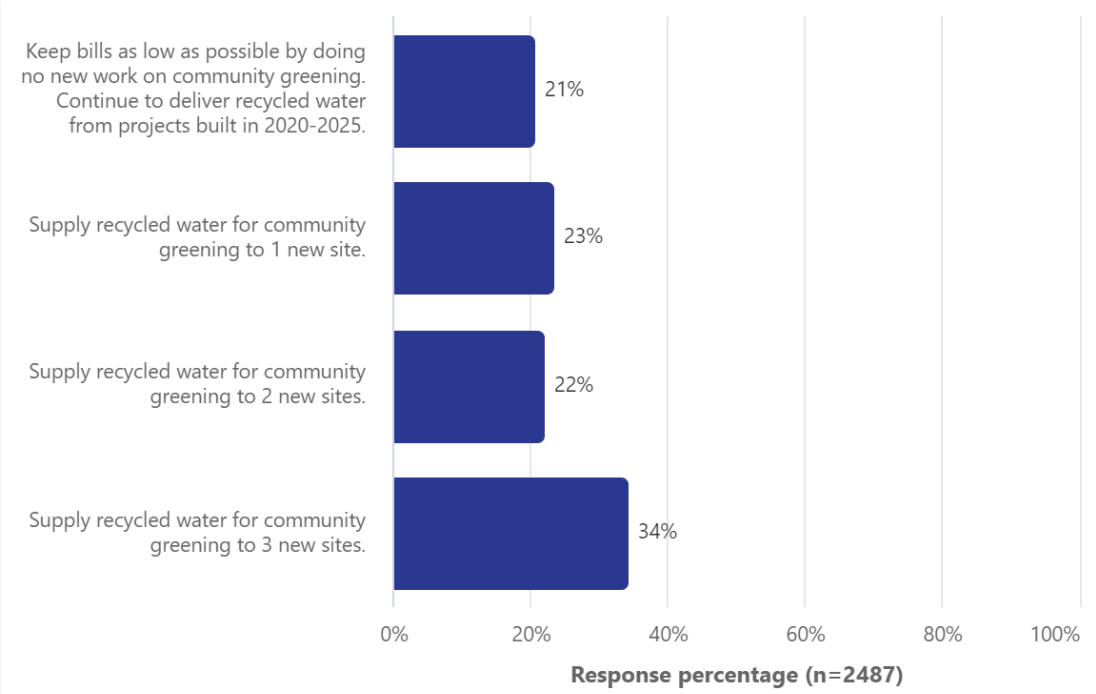
How much are customers willing to pay?

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.

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."

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)	Held online workshops with 96 customers from across the Hunter Water service area, including: 1. Newcastle 2. Lake Macquarie 3. Port Stephens 4. Maitland 5. Cessnock 6. Dungog **Objective:** To understand the interests, concerns and priorities of Hunter Water customers. Additionally, to understand their values and what experiences embody those values.
External interviews (October 2022)	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. **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.
Exploration focus groups (October to November 2022)	Held focus groups with 55 customers, including: 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 **Objective:** To understand how different types of customers view their role in making decisions that will have an impact on bills.
Quarterly surveys (August and November 2022)	Heard from 507 customers in August 2022 survey and 219 customers in the November 2022 survey. You can read more about the survey methodology here. **Objective:** To ensure that all Hunter Water customers had the opportunity to have a say in this early stage of the engagement.
Non-residential interviews (January to May 2023)	Conducted interviews with 42 members of the Hunter Water business community. **Objective:** To understand the interests, concerns and priorities of Hunter Water's non-residential customers.

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)	Heard from 3,102 customers in an online survey. You can read more about the survey methodology here. **Objective:** To establish the preferred ways to deliver the experiences that customers value.
Bill Simulator (April to May 2023)	Heard from 2,487 customers in an online survey. You can read more about the Bill Simulator methodology here. **Objective:** To understand what customers are willing to pay (or not pay) for services they think Hunter Water should keep, reduce or enhance.
Valuation focus groups (April 2023)	Held focus groups with 47 customers, including: 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 **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.

Methodologies

This section describes how each technique was run.

Quarterly survey methodology

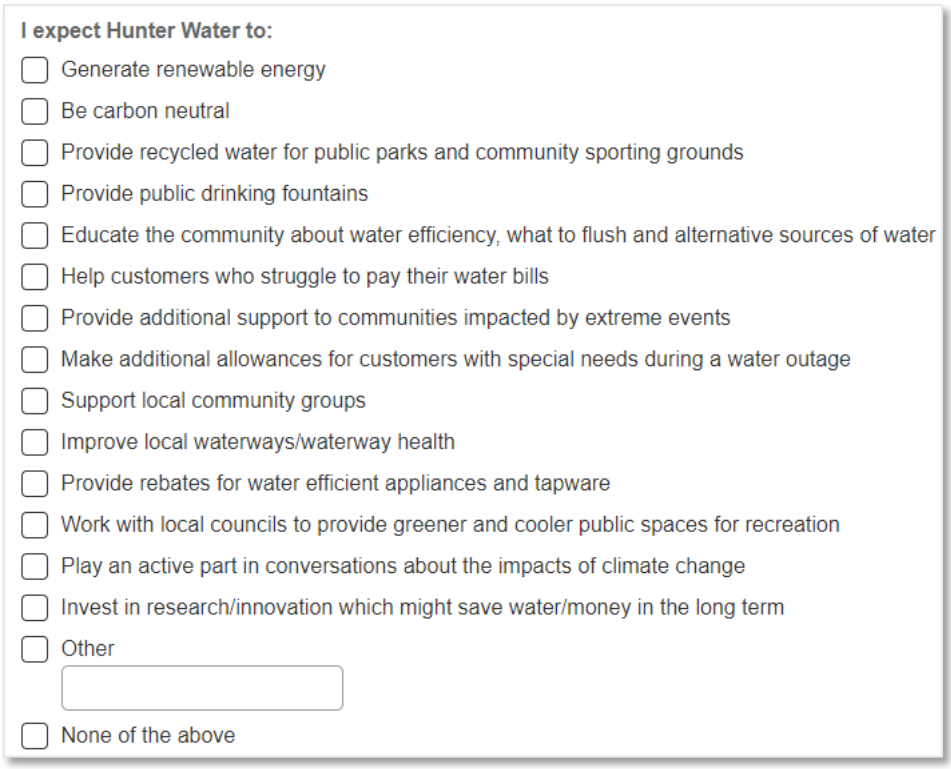
Hunter Water also runs a survey each quarter. There was fieldwork in August and November 2022 which has been used in this report.

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.

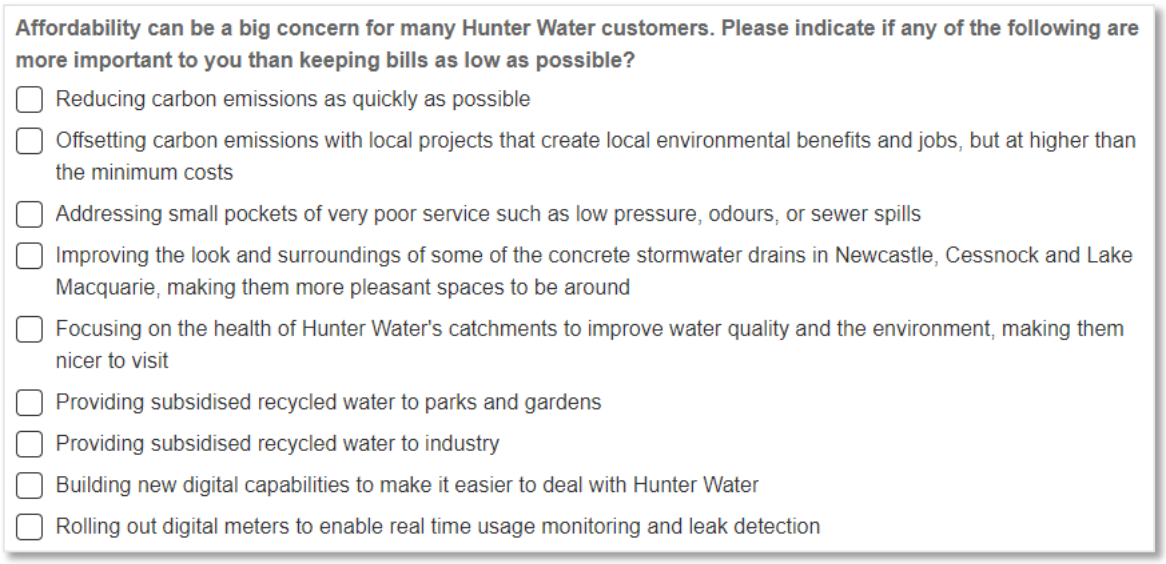
Overall, 507 completed responses were received to the August survey, and 219 completed responses were received to the November survey.

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.

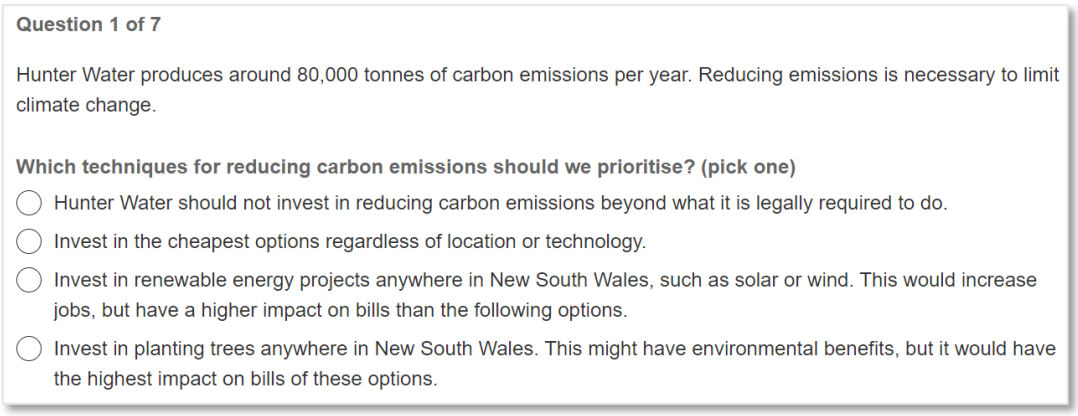
The priorities survey was cross promoted at the end of the Bill Simulator survey, noting the incentive of an additional competition entry upon completion of an extra survey.

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 bills[1] 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.**

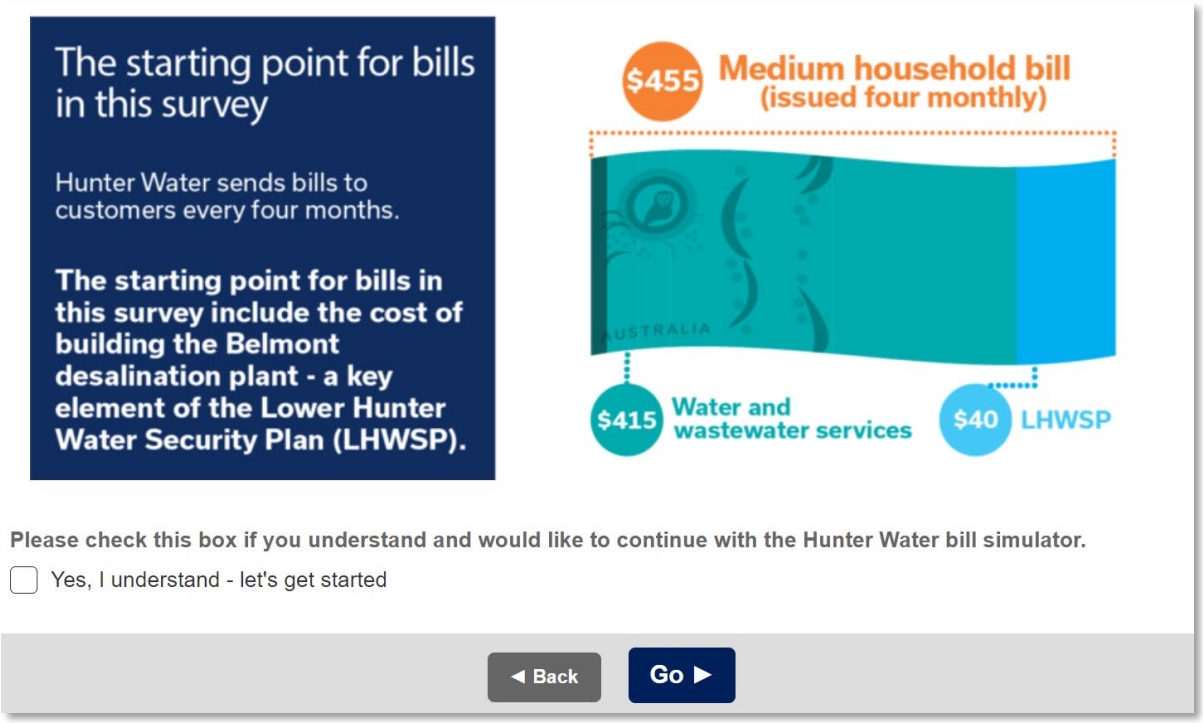
This survey includes the bill increases related to building the Belmont desalination plant which was a key element of the Lower Hunter Water Security Plan (LHWSP). *The community was extensively involved in developing the LHWSP over three years, and the plan was approved by the NSW Government in April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

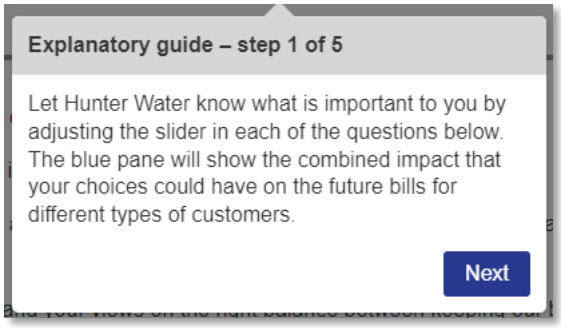
Our prices are regulated by the Independent Pricing and Regulatory Tribunal (IPART), which goes through any proposed changes to our prices very carefully to make sure we don't charge more than we need to.

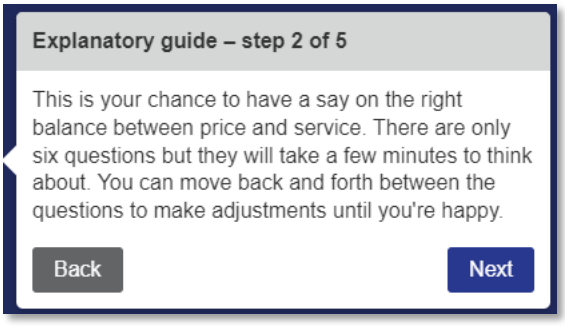
[1] At the time of running the Bill Simulator, we used the Lower Hunter Water Security Plan (LHWSP) costs that had previously been communicated to the public to explain the starting point for bills. Hunter Water is working hard to determine what all of the costs that comprise the starting point for bills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



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:



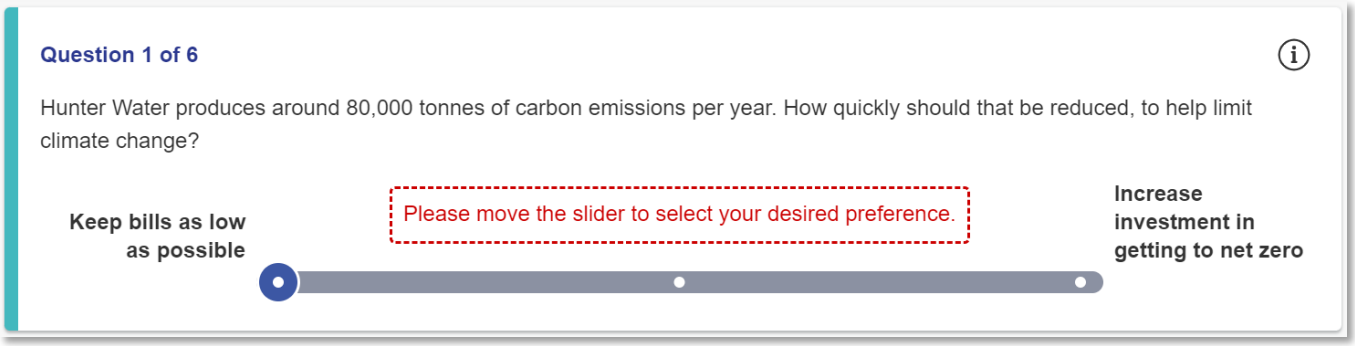


The Bill Simulator had six questions. The six questions were presented on sliding scales where respondents selected the appropriate balance between two anchors. Three of the sliding scale questions had four “snap points” to select from, two questions had three “snap points”, and one question had five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

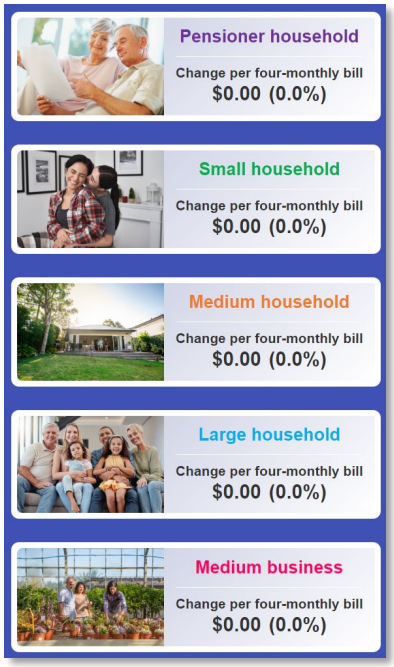


The average bill impact for different types of customers was presented to respondents while they considered and responded to the questions in the simulator.

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

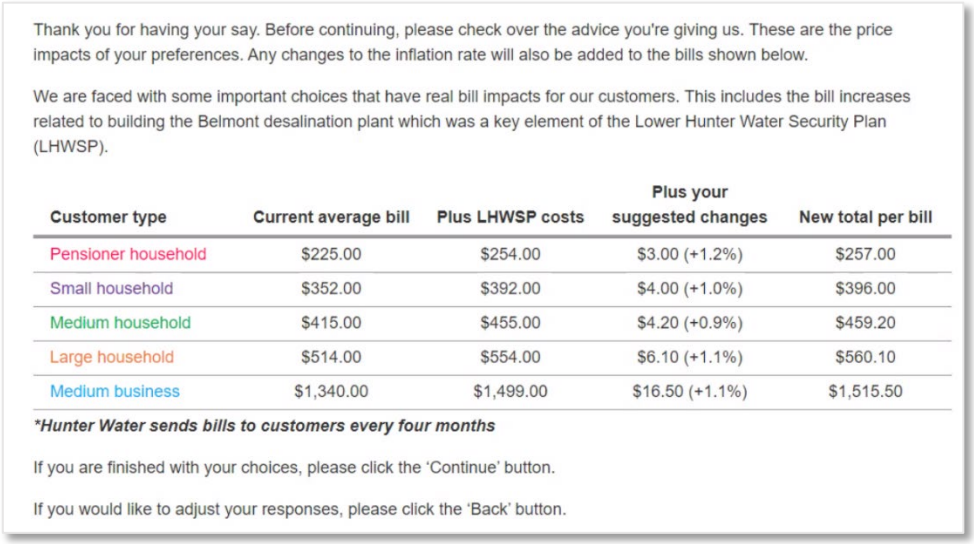
- **Pensioner household** – Household of one or two people who have relatively low water use (100KL per year) and receive a rebate (e.g. Pensioner Concession Card or Veterans' Affairs Gold Card).
- **Small household** – Household of one or two people who have relatively low water use (110KL per year).
- **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.



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.

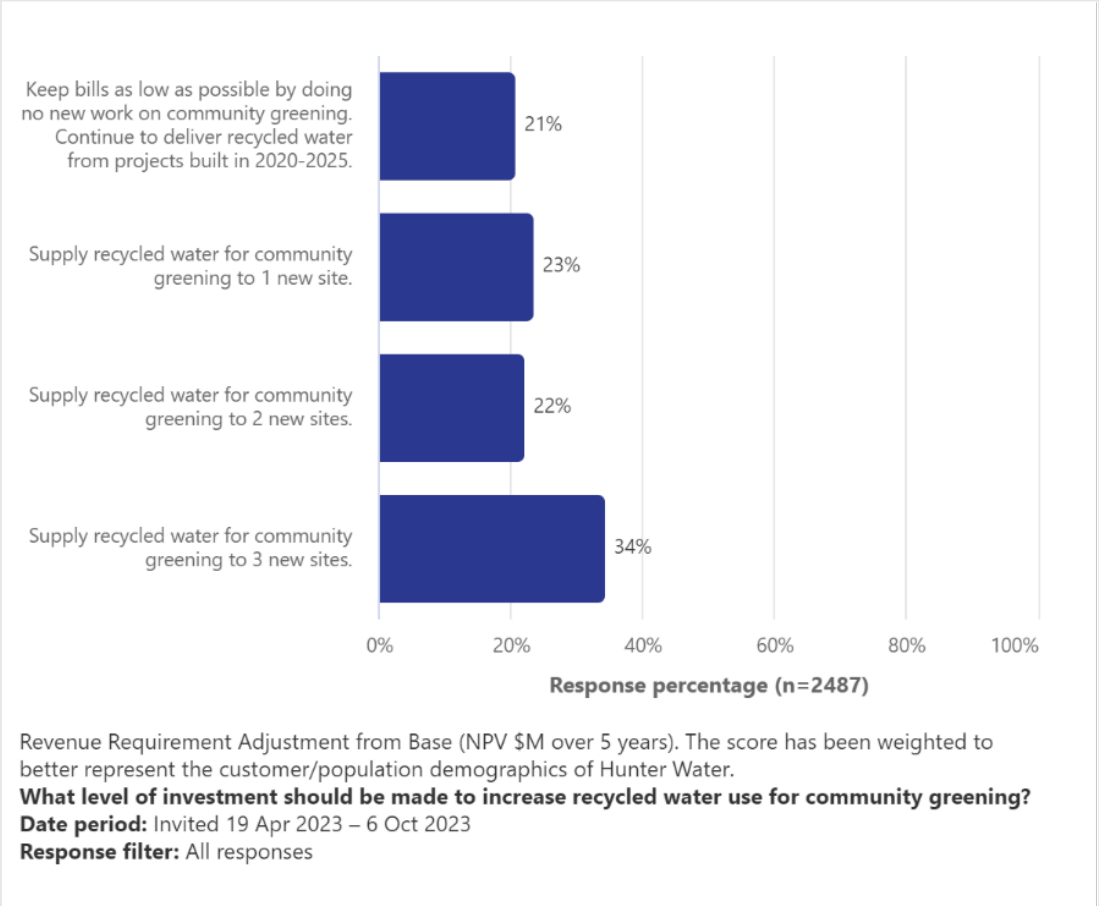
So, for the Bill Simulator outputs in this report we've shown you what the customer choices add up to in terms of a change to the revenue requirement. The rules state that money spent on operational things is added to the revenue requirement in the year when it is spent. Money spent on long term assets 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.

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?



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 – 6 Oct 2023
Response filter: All responses

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 population[2]. 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 type[3], 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."

- “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)

Bill Simulator Results Portal (insyncsurveys.com.au)

Login: pricing.engagement@hunterwater.com.au

Password: CommunityPanel@2024

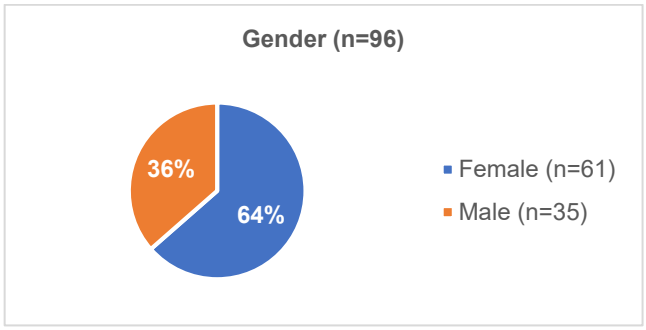
E. Summary of responses analysed for this report

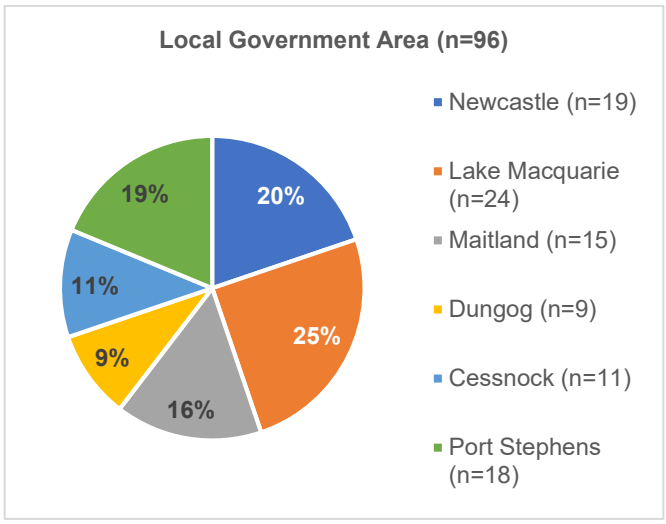
Summary of responses analysed for this report

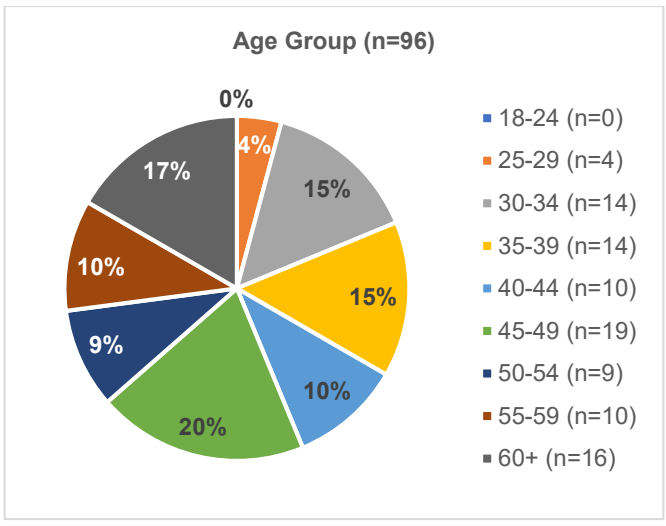
More than 6,500 customer responses have been analysed for this report.

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

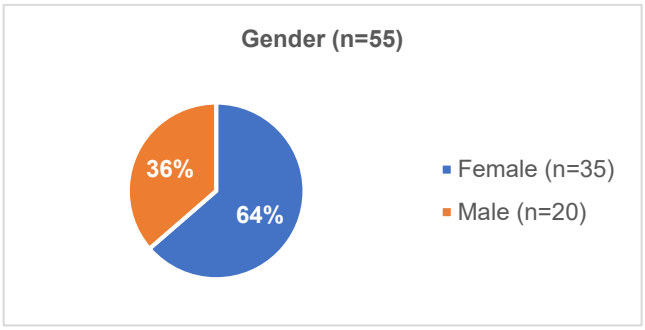
Specific response statistics: Listening posts

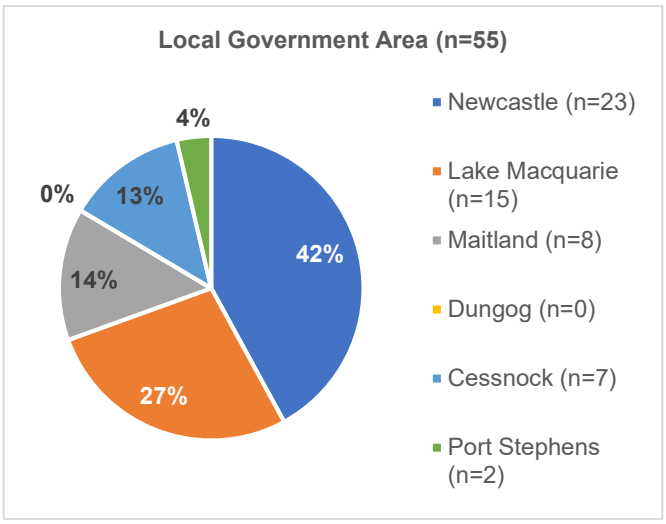


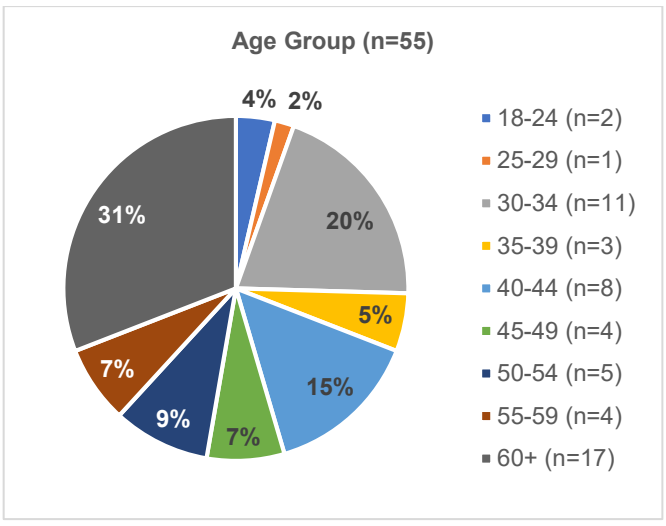




Specific response statistics: Exploration focus groups

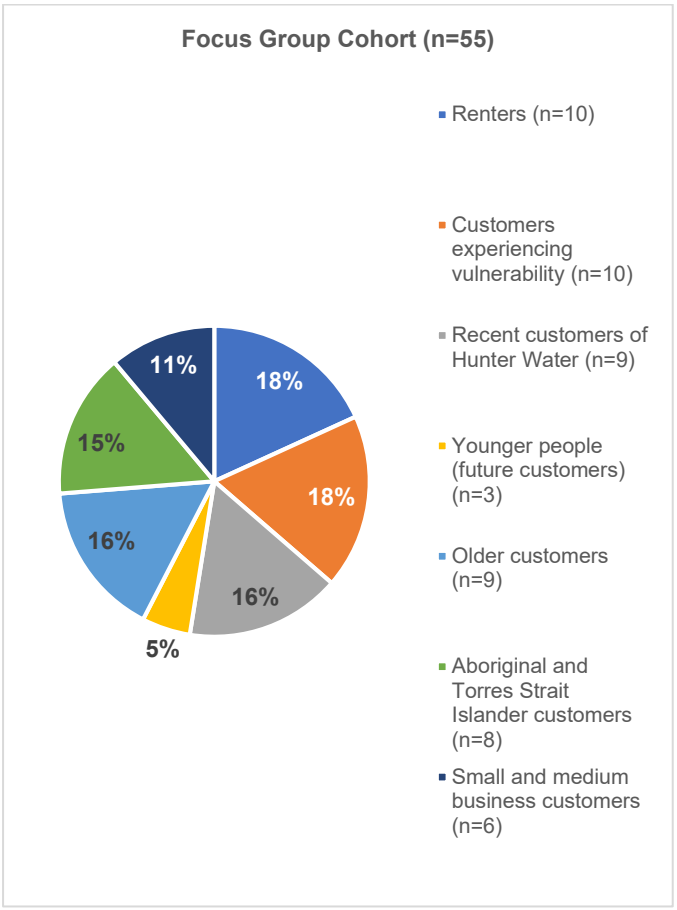






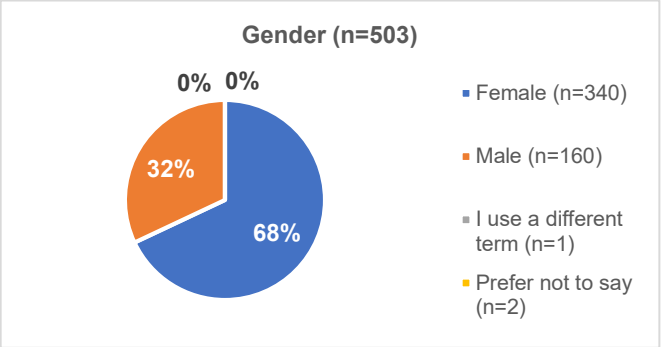
E. Summary of responses analysed for this report

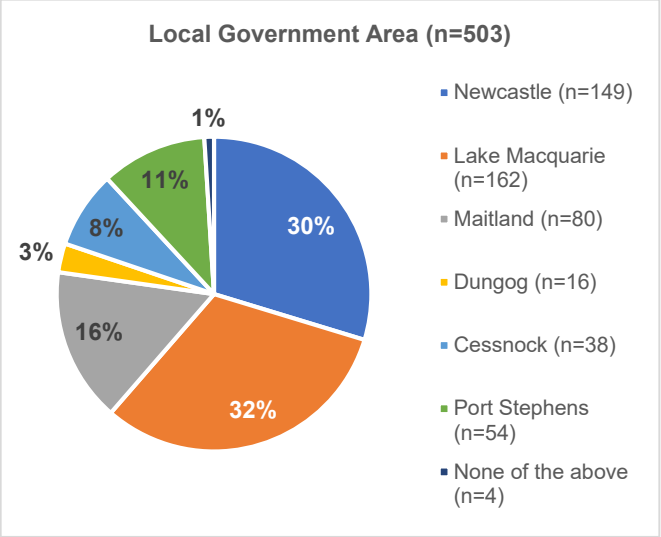
Specific response statistics: Exploration focus groups

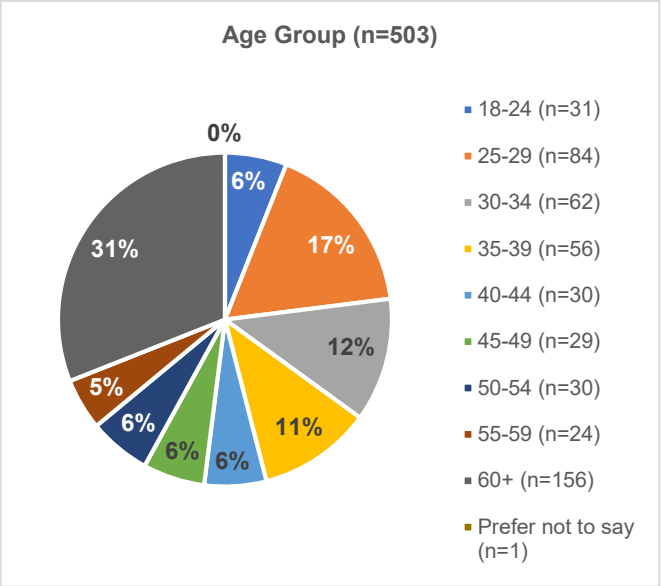


E. Summary of responses analysed for this report

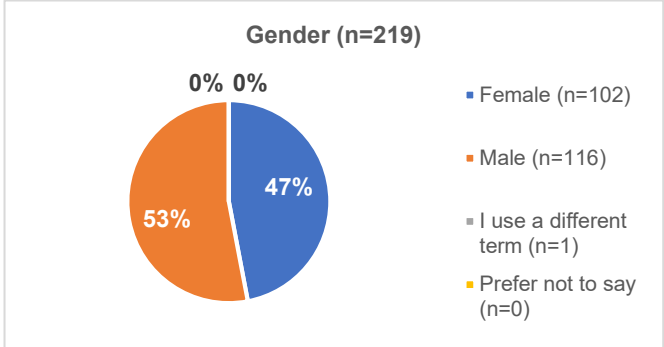
Specific response statistics: Quarterly survey (August 2022)

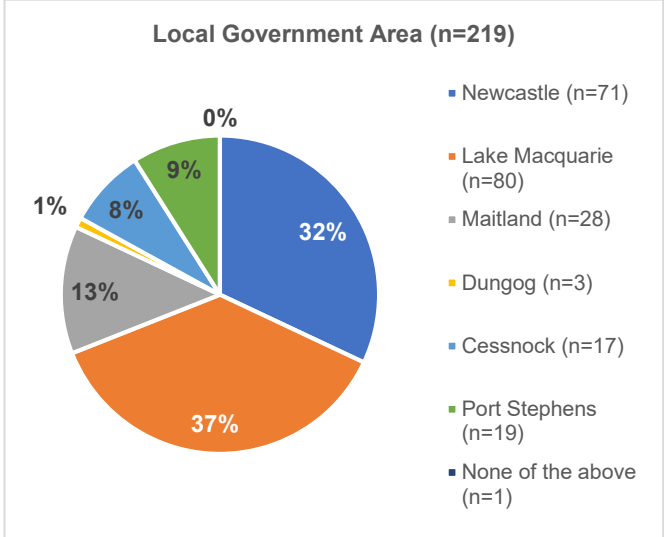


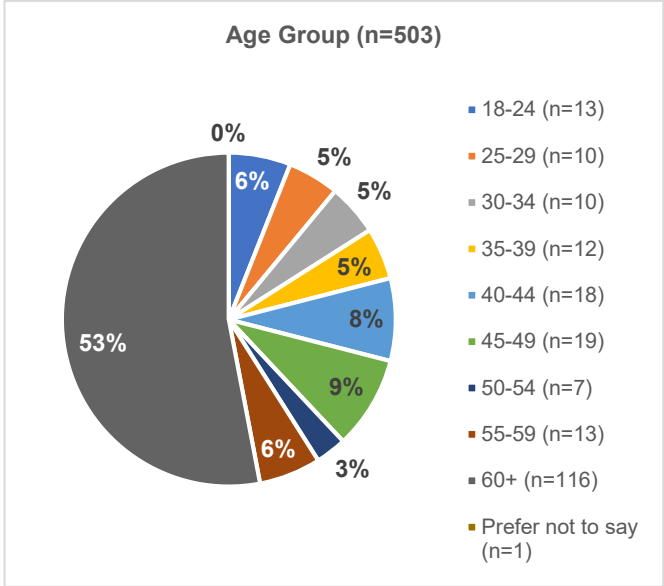




Specific response statistics: Quarterly survey (November 2022)

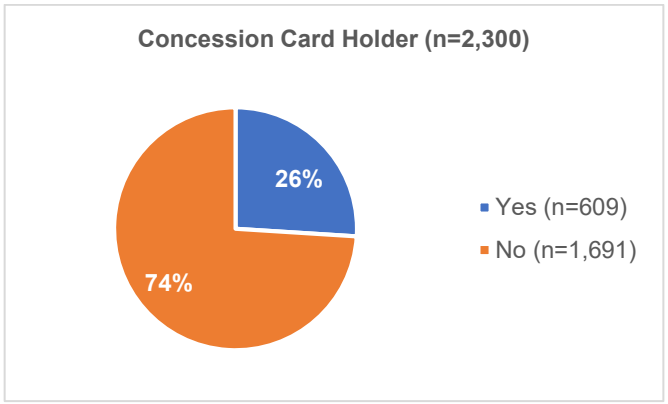


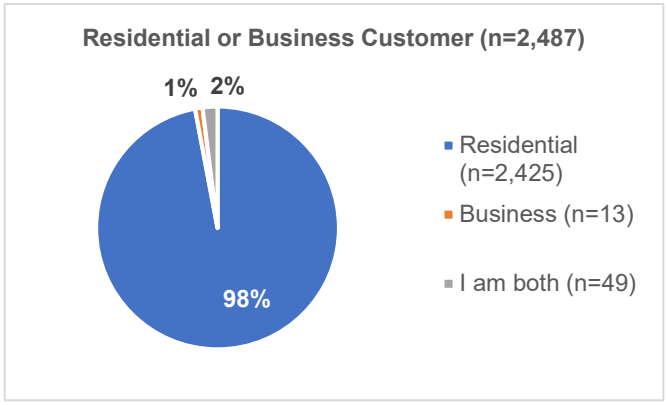


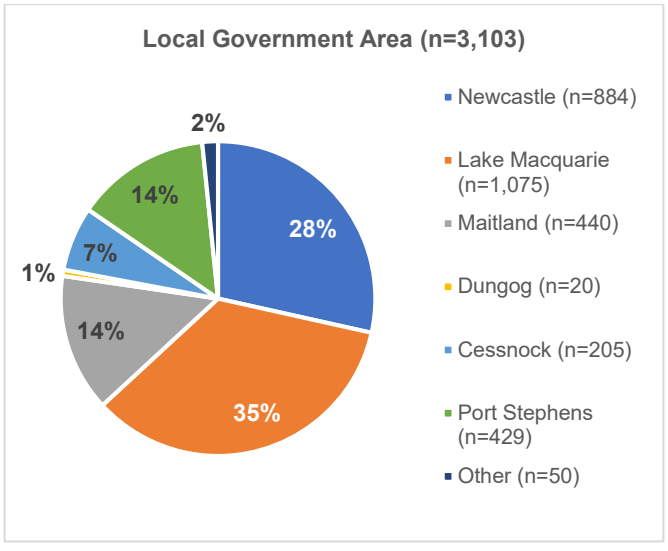


E. Summary of responses analysed for this report

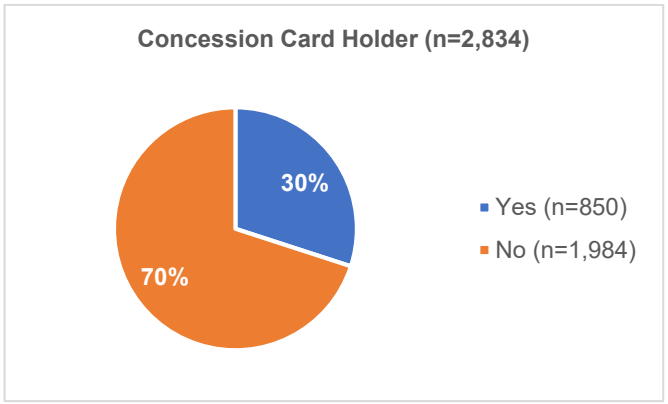
Specific response statistics: Bill Simulator

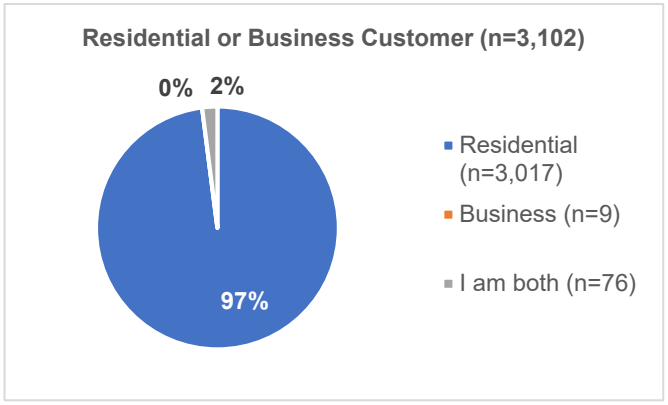


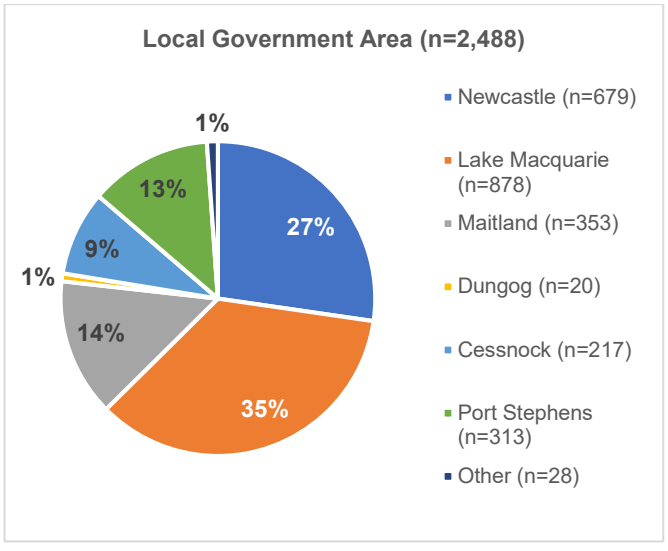




Specific response statistics: Priorities survey

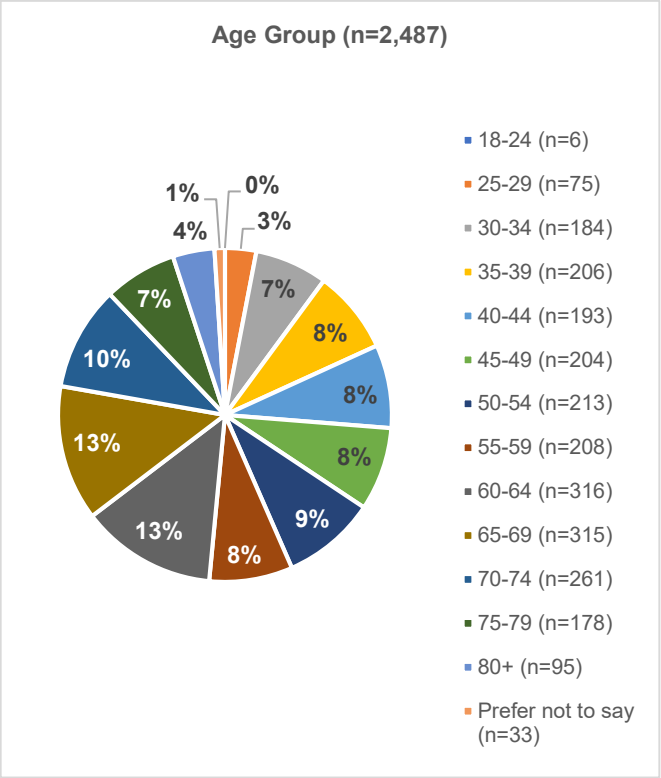




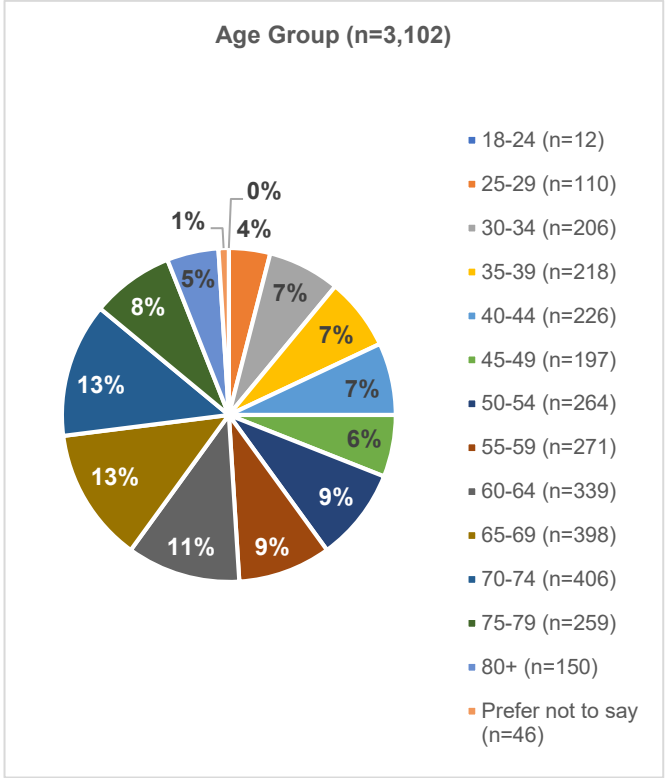


E. Summary of responses analysed for this report

Specific response statistics: Bill Simulator

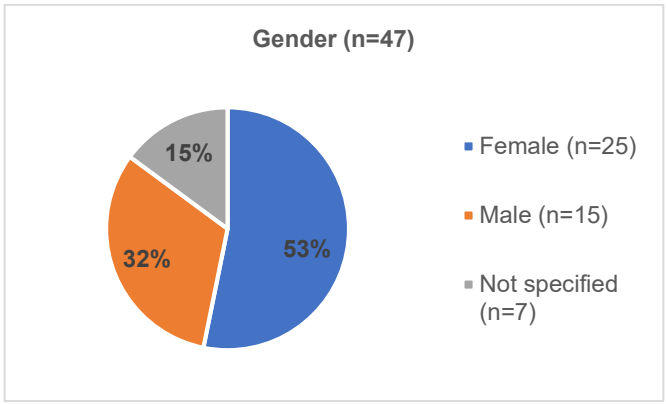


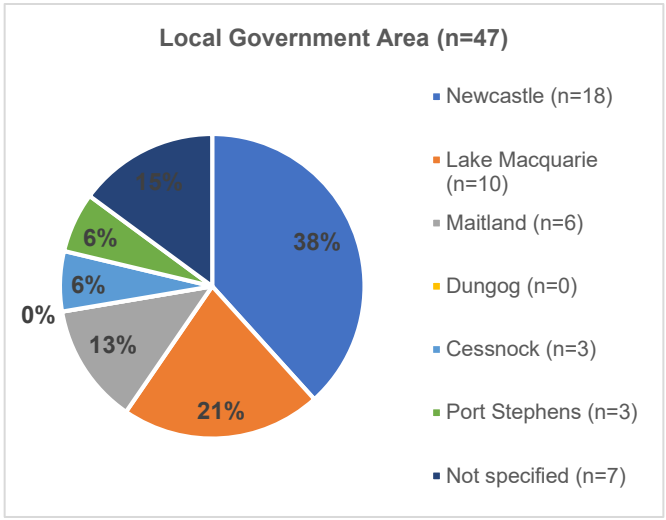
Specific response statistics: Priorities survey

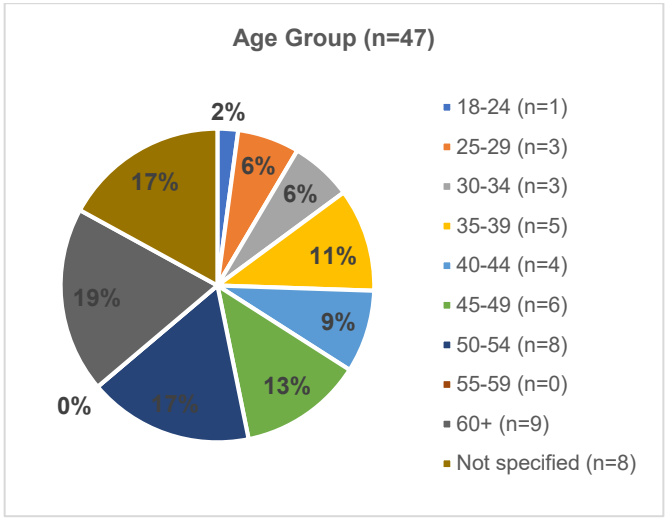


E. Summary of responses analysed for this report

Specific response statistics: Valuation focus groups

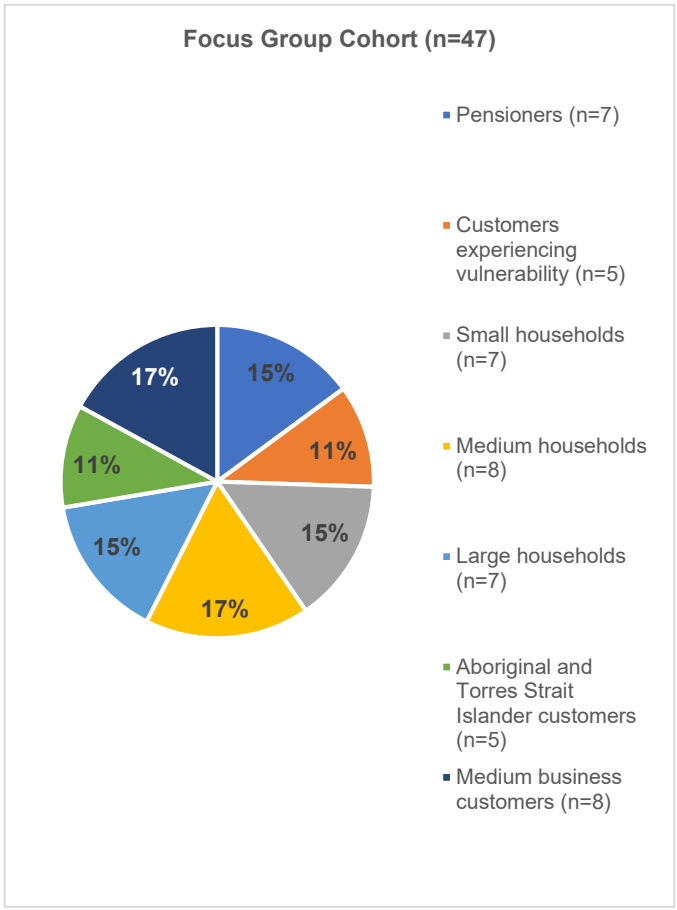






E. Summary of responses analysed for this report

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

GLOSSARY

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_2e	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 *what* customers want us to deliver in terms of the desired change or benefit, while maintaining flexibility on *how* 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.

GLOSSARY

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.

GLOSSARY

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.

GLOSSARY

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).

Bill Impact Look-up Table

In the Guidebook, Engagement Report and Day 2 presentation we mentioned that:

- Hunter Water is owned by the NSW Government and the way the business is structured it set in law. The way we are set up means that we must pass (almost) all our costs through to customers.
- There are complex financial decisions to consider in this deliberation, but not everybody is an accountant or economist. However, most people do pay a bill, so it is important that people can participate regardless of whether or not they have a finance background. This table is designed to remove some of the complexity.
- The prices that we charge are set by the Independent Pricing and Regulatory Tribunal (IPART).
- IPART protects customers by making sure that our costs are not wasteful, and our prices are in customers' long-term interests.
- Prices are based on an approach called a building block model. The model turns costs into a total revenue requirement. Prices are calculated by dividing the revenue requirement by the number of customers and the volume of water used.
- The revenue requirement can be thought of as the amount of revenue we need to collect to cover our cost to operate. These costs include employee wages, maintaining pipelines, building new and replacing old assets, the cost of capital and paying for chemicals and electricity to run pump stations and treatment plants.
- Our costs can be divided into operating costs and capital costs. For example, electricity is an operating cost and most pipes and pumps are capital costs.
- The building block model treats operating costs and capital costs differently. This is important, since operating costs get charged to customers immediately, whereas capital costs get charged to customers over many years, sometimes decades.
- We have put this table together so that you don't have to think about operating or capital costs, just about the total change to the revenue requirement and thus to bills.
- Continuing to provide the same level of service is becoming more costly, for various reasons. Customer prices will need to increase, even to deliver the same level of service that we currently provide.
- Achieving better outcomes for customers, communities and the environment involves higher costs. The higher costs mean we must charge higher prices. *Remember, there's no 'magic pudding' that means we can provide better outcomes without increasing prices.*
- We are asking the Community Panel to recommend the change in outcome that's best for the *whole community* in 2025-2030 (if any), given the impacts on bills for different types of customers.

By considering a 'revenue requirement' needed to make improvements we can estimate bill impacts without having to think about whether the costs are capital costs or operating costs.

How much a customer's bill goes up in response to increases in revenue requirement depends on factors such as concession status, whether they are a residential or business customer, owning (or buying) their own home or renting, and also how much water they use.

The table on the next page will help you understand, for a range of revenue requirements, the impact on an average bill of different customer types. These are our best estimates.

When considering recommendations that would result in improved services, please note that the bill impacts would be additional to the base increase.

We need to spend more - because we need to do more, and at the same time our input costs are increasing. We need to renew aging assets that are at risk of failing, meet standards set in laws and regulations, cater for growth, and build the Belmont desalination plant which was a key element of the Lower Hunter Water Security Plan. We are also facing higher interest rates on borrowings (debt) and it costs more to build things these days.

We understand that affordability is a concern for our customers, so the base increase already prioritises our expenditure (costs). We have already committed to becoming more efficient, which will save our customers tens of millions of dollars.

Bill Impact Look-up Table

After 30 June 2030, we don't know whether bills will change or stay the same. We will need to continue to pay for some of the infrastructure that we've built that lasts a long time but we don't know whether other factors will change (e.g. interest rates).

To help you understand the tables on the following pages, please see the following example:

- A revenue requirement increase of $10 million is estimated to result in a $1.90 per year, or 63 cents per bill, increase for **pensioner households**. This increase occurs every year, which means pensioner household water and wastewater bills are estimated to be $9.50 per year higher in 2029-30 [5 years multiplied by (x) $1.90 per year]. The increases are additional to the base increase of $41 per year.
- A revenue requirement increase of $15 million is estimated to result in a:
  - $4.00 per year increase in bills for **typical households** *receiving water, wastewater and stormwater services from Hunter Water* (five cents less if all their stormwater services are provided by Council). This increase occurs every year, which means the increase is estimated to be $20.00 per year higher in 2029-30 [5 years multiplied by (x) $4.00 per year]. The increases are additional to the base increase of $85 per year (base increase of $56 per year if all stormwater services are from Council).
- A revenue requirement increase of $5 million is estimated to result in a $5.50 per year increase in bills for **medium businesses**. This increase occurs every year, which means Hunter Water bills are estimated to be $27.50 per year higher in 2029-30 [5 years multiplied by (x) $5.50 per year]. The increases are additional to the base increase of $219 per year.
- These increases are in today's dollars ($2023-24). Prices will also increase by inflation each year. The Reserve Bank of Australia targets aims to keep inflation between 2% and 3% per year, but it has recently been much higher.

Customer types	
Pensioner household 	Household of one or two people who own their own home, live in a house, have relatively low water use (100kL per year), and receive a concession.
Small household 	Household of one or two people who own their own home, live in an apartment and have relatively low water use (110kL per year).
Typical household 	Household of three or four people who own their own home, live in a house and have average water use (181kL per year)
Large household 	Household of five or more who live in a house with a big garden and/or pool, who own their own home and have high water use (290kL per year)
Medium business 	Medium business with higher water uses e.g. a cafe, hairdresser or garden nursery (360kL per year).

Water charges

Wastewater charges

Stormwater charges

Bill Impact Look-up Table

Impacts each year per annual bill across 2025-2030

When considering affordability, please remember that each block is added every year. That means each number will be five (5) times bigger by 2030.

Annual bills for different customer types in 2023-24	Pensioner household	Small household	Typical household		Large household	Medium business
						
	$726	$1,135	$1,340	$1,437	$1,655	$4,316
Base increase	$41	$56	$56	$71	$56	$219
Revenue Requirement ($million)	**Estimated changes to bills for each customer type based on revenue requirement**					
0	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
1	$0.20	$0.25	$0.30	$0.30	$0.30	$1.10
2	$0.40	$0.50	$0.55	$0.55	$0.55	$2.20
3	$0.60	$0.75	$0.80	$0.80	$0.80	$3.30
4	$0.80	$1.00	$1.05	$1.10	$1.05	$4.40
5	$0.95	$1.25	$1.35	$1.35	$1.35	$5.50
6	$1.15	$1.50	$1.60	$1.60	$1.60	$6.55
7	$1.35	$1.75	$1.85	$1.90	$1.85	$7.65
8	$1.55	$2.00	$2.10	$2.15	$2.10	$8.75
9	$1.75	$2.25	$2.35	$2.40	$2.35	$9.85
10	$1.90	$2.45	$2.65	$2.70	$2.65	$10.95
11	$2.10	$2.70	$2.90	$2.95	$2.90	$12.05
12	$2.30	$2.95	$3.15	$3.20	$3.15	$13.10
13	$2.50	$3.20	$3.40	$3.50	$3.40	$14.20
14	$2.70	$3.45	$3.65	$3.75	$3.65	$15.30
15	$2.85	$3.70	$3.95	$4.00	$3.95	$16.40
16	$3.05	$3.95	$4.20	$4.30	$4.20	$17.50
17	$3.25	$4.20	$4.45	$4.55	$4.45	$18.55
18	$3.45	$4.45	$4.70	$4.80	$4.70	$19.65
19	$3.65	$4.70	$5.00	$5.10	$5.00	$20.75
20	$3.80	$4.90	$5.25	$5.35	$5.25	$21.85

Bill Impact Look-up Table

Notes on the table of bill impacts:

1. Estimates of this year's bills (2023-24) are rounded to the nearest dollar.

2. Estimates of bill increases associated with an increased revenue requirement are rounded up to the nearest $0.05 per year.

3. Estimates are based on the best available information at the time. The modelling is complicated and sensitive to changes in assumptions and inputs. Our modelling will continue to be refined until we submit our Pricing Proposal. However, one of the inputs (WACC) is affected by parameters from financial markets, which IPART will update when it makes its Final Price Determination in May 2025.

4. Estimates are before inflation, that is, in today's dollars ($2023-24). Prices will also increase by inflation each year. The Reserve Bank of Australia aims to keep inflation between 2% and 3% per year, but it has recently been much higher.

5. Divide by three (3) to see amount in $ per bill.

6. In New South Wales, a landlord can ask a tenant to pay water usage charges if the property is separately metered, and the charges are not more than the amount the landlord is billed for by the water supplier, and. the property meets the 'water efficiency' standards. However, tenants feel the impacts of increases in service charges (fixed charges) because the landlord may pass-through the additional charges by increasing rents.

7. Revenue requirement is in present value terms, therefore the effective of timing of expenditure across the five years has been neutralised. Another way of thinking of this is: we've made an adjustment so that you don't need to think about which of the five years the change in revenue requirement happens (or which year money is spent).

8. Only about 70,000 of Hunter Water's 270,000 connected properties receive a stormwater service from Hunter Water. The remaining 200,000 connected properties receive all their stormwater services from their local council; therefore the costs are covered by council rates.

Guest Contributors for Hunter Water Community Panel Day 1

1. Douglas McCloskey – Program Director, Energy and Water Consumers' Advocacy Program at Public Interest Advocacy Centre

Topic: How to get the most out of a deliberative forum

Douglas is the program director of the energy and water team at the Public Interest Advocacy Centre (PIAC). PIAC are an independent not-for-profit who engage with energy and water businesses and government agencies to help ensure the voice of people and communities influences important decisions about affordable access to energy and water.

2. Glen Robinson – Acting Executive Manager, Customer Delivery at Hunter Water

Topic: Hot spots

Glen has more than 20 years of experience in the water sector, including in infrastructure planning, capital delivery, system operations, asset maintenance and customer services. As Hunter Water's Acting Executive Manager Customer Delivery, Glen is responsible for planning, building, operating and maintaining the assets that deliver Hunter Water's services.

3. James Willing – Team Leader, Sustainability and Climate Change at Hunter Water

Topic: Carbon reduction

James is team leader of climate change and sustainability at Hunter Water, he leads a team to help the organisation understand the impacts to our operations and assets from climate change. He has previous led sustainability, risk and strategy functions in the transport and higher education sector.

4. Emma Turner – Senior Economist at Hunter Water

Topic: Understanding prices and charges

Emma has worked in the water industry for more than 20 years. She's part of the team coordinating Hunter Water's pricing proposal. This will be her 4th.

5. James Garriock – Executive Director at Insync

Topic: Engagement methodology

James is Executive Director at Insync, the company that has been helping Hunter Water with the engagement for more than a year. He and his partners started Insync in 2003. James and his team are specialists in price submission engagement for water corporations – this is his 16th price submission.

6. Julia Irwin – Program Lead, Water Conservation at Hunter Water

Topic: Encouraging customers to use less water and reduce their leaks

Julia has more than 20 years experience in the water industry and is currently the Program Lead for Water Conservation. She has oversight of Hunter Water's water conservation program and works with others internally and externally to continually look at ways to drive improvements in this area.

7. Colin Hancock – Group Manager, Water Resilience at Hunter Water

Topic: Reducing leaks from the Hunter Water system

Colin has more than 20 years experience and leads the Water Resilience and Science group at Hunter Water. One of the functions of Colin's group is water security planning and water conservation. This includes setting strategic objectives around leakage. Previously Colin has led Hunter Water's operational response to leakage management.

8. Tony McClymont – Program Lead, Recycled Water and Integrated Water Management at Hunter Water

Topic: Using recycled wastewater or stormwater for industry

Tony is part of the Sustainability and Waterways team at Hunter Water and leads the development of the recycled water program. His more than 20 years in the water industry has included roles in strategy, infrastructure planning, systems operations and asset maintenance.

9. David Derkenne – Group Manager, Sustainability and Waterways at Hunter Water

Topic: Using recycled wastewater or stormwater for community greening

David leads the Sustainability and Waterways group at Hunter Water, and has developed a strong interest in resource management over his 20 years in the water industry. One of the areas his group is tasked with is leading Hunter Water's approach to recycled water.

Guest Contributors for Hunter Water Community Panel – Day 2

1. Glen Robinson – Executive Manager, Customer Delivery at Hunter Water

Topic: Hot Spots

Glen has more than 20 years of experience in the water sector, including in infrastructure planning, capital delivery, system operations, asset maintenance and customer services. As Hunter Water's Executive Manager Customer Delivery, Glen is responsible for planning, building, operating and maintaining the assets that deliver Hunter Water's services.

2. Jarrod Wynn – A/Group Manager Asset Solutions at Hunter Water

Topic: Hot Spots

Jarrod has 20 years of experience in the water, construction and engineering sector. As the Team Leader of Civil Engineering, Jarrod is responsible for asset management of the civil assets, this includes assets like Dams through to Reservoirs and Pipes for Water and Sewer.

3. Jennifer Maverick – Senior Catchment Engineer at Hunter Water

Topic: Hot Spots

During her time as a wastewater network engineer Jennifer has worked on many aspects of ensuring the Hunter Water wastewater network performs as it is designed to. She has actively worked in the field with customers to provide solutions across dry and wet weather overflow issues as well as established preventative programs to prevent and reduce the severity of overflows.

4. Robert Main – Group Manager Planning and Engineering at Hunter Water

Topic: Hot Spots and water conservation

Rob has over 25 years of experience in the local government and water sector, covering a variety of roles. As the Group Manager of Planning and Engineering, Rob is responsible for understanding the condition and capacity of assets, developing solutions to address customer and regulation needs as well as reducing leakage from water networks. (Rob is also SME for leakage).

5. Julia Irwin – Program Lead, Water Conservation at Hunter Water

Topic: Water Conservation

Julia has more than 20 years experience in the water industry and is currently the Program Lead for Water Conservation. She has oversight of Hunter Water's water conservation program and works with others internally and externally to continually look at ways to drive improvements in this area.

6. Tony McClymont – Program Lead, Recycled Water and Integrated Water Management at Hunter Water

Topic: Water Conservation

Tony is part of the Sustainability and Waterways team at Hunter Water and leads the development of the recycled water program. His more than 20 years in the water industry has included roles in strategy, infrastructure planning, systems operations and asset maintenance.

7. James Willing – Team leader, Sustainability and Climate Change at Hunter Water

Topic: Carbon Reduction

James is team leader of climate change and sustainability at Hunter Water, he leads a team to help the organisation understand the impacts to our operations and assets from climate change. He has previously led sustainability, risk and strategy functions in the transport and higher education sector.

Guest Contributors for Hunter Water Community Panel – Day 3

Erin Cini – Director Strategy and Partnerships for the Water Services Association of Australia (WSAA)

Topic: Industry standards and benchmarks around water conservation

The Water Services Association of Australia is the peak industry body representing the urban water industry. Our members provide water and sewerage services to over 24 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Erin Cini is the Director Strategy and Partnerships at the Water Services Association of Australia. Erin has 20 years' experience in the water industry, with roles in policy and regulation, planning, engineering design and construction, including previously working for the National Water Commission, IPART and the NSW Government's Water Group.

Jason Mingo – Liveable Communities Manager for the Water Services Association of Australia (WSAA)

Topic: Industry standards and benchmarks around water conservation

Jason Mingo is Manager Liveable Communities at the Water Services Association of Australia. Jason has experience across the water industry having worked for government in project research, development and innovation, strategy and policy, and now leading a portfolio of work focussed on climate change, water quality and the role of water in achieving thriving communities.

Nigel Waters – Committee Member for EcoNetwork Port Stephens

Topic: Water conservation initiatives led by community groups

EcoNetwork Port Stephens is a not-for-profit and 100% volunteer-run organisation dedicated to the interests of all who treasure and want to preserve the natural beauty and biodiversity of our Port Stephens estuary, peninsulas and rural hinterland. We represent more than 20 affiliate environmental groups and individual members. We campaign for environmentally responsible decision-making, share information to support environmental sustainability and cultural heritage, and assist our members and affiliates in achieving their objectives. See https://www.econetworkps.org/

Nigel Waters is active in several affiliate groups, has been an EcoNetwork Committee member for many years, and was Port Stephens first Environmental Citizen of the Year in 2019.

David Derkenne – Group Manager, Sustainability and Waterways at Hunter Water

Topic: Benefits and costs of water conservation, specifically relating to recycled water for community greening

David leads the Sustainability and Waterways group at Hunter Water, and has developed a strong interest in resource management over his 20 years in the water industry. One of the areas his group is tasked with is leading Hunter Water's approach to recycled water.

Tony McClymont – Program Lead, Recycled Water and Integrated Water Management at Hunter Water

Topic: Benefits and costs of water conservation, specifically relating to recycled water for business and industry

Tony is part of the Sustainability and Waterways team at Hunter Water and leads the development of the recycled water program. His more than 20 years in the water industry has included roles in strategy, infrastructure planning, systems operations and asset maintenance.

Julia Irwin – Program Lead, Water Conservation at Hunter Water

Topic: Benefits and costs of water conservation, specifically relating to encouraging customers to use less water

Julia has more than 20 years experience in the water industry and is currently the Program Lead for Water Conservation. She has oversight of Hunter Water's water conservation program and works with others internally and externally to continually look at ways to drive improvements in this area.

Robert Main – Group Manager Planning and Engineering at Hunter Water

Topic: Benefits and costs of water conservation, specifically relating to encouraging customers to reduce their leaks

Rob has over 25 years of experience in the local government and water sector, covering a variety of roles. As the Group Manager of Planning and Engineering, Rob is responsible for understanding the condition and capacity of assets, developing solutions to address customer and regulation needs as well as reducing leakage from water networks. (Rob is also SME for leakage).

Guest Contributors for Hunter Water Community Panel – Day 4

Devni Edirisinghe – Representative from Rising Tide

Topic: Youth perspective on carbon reduction

Devni Edirisinghe is a passionate, second year renewable energy engineering student at the University of Newcastle. She has spent one year with Rising Tide – a grassroots climate activist community – and during that time has been deeply committed to combatting the climate crisis. Devni has participated in climate rallies and protests where she often MCs or speaks.

Erin Cini – Director Strategy and Partnerships for the Water Services Association of Australia (WSAA)

Topic: Carbon reduction options and costs

The Water Services Association of Australia is the peak industry body representing the urban water industry. Our members provide water and sewerage services to over 24 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Erin Cini is the Director Strategy and Partnerships at the Water Services Association of Australia. Erin has 20 years' experience in the water industry, with roles in policy and regulation, planning, engineering design and construction, including previously working for the National Water Commission, IPART and the NSW Government's Water Group.

Jason Mingo – Liveable Communities Manager for the Water Services Association of Australia (WSAA)

Topic: Carbon reduction options and costs

Jason Mingo is Manager Liveable Communities at the Water Services Association of Australia. Jason has experience across the water industry having worked for government in project research, development and innovation, strategy and policy, and now leading a portfolio of work focussed on climate change, water quality and the role of water in achieving thriving communities.

David Derkenne – Group Manager, Sustainability and Waterways at Hunter Water

Topic: Why should Hunter Water do more than it legally has to do on carbon reduction?

David leads the Sustainability and Waterways group at Hunter Water, and has developed a strong interest in resource management over his 20 years in the water industry. One of the areas his group is tasked with is leading Hunter Water's approach to carbon reduction and climate change adaptation.

James Willing – Team Leader, Sustainability and Climate Change at Hunter Water

Topic: Why should Hunter Water do more than it legally has to do on carbon reduction?

James is team leader of climate change and sustainability at Hunter Water, he leads a team to help the organisation understand the impacts to our operations and assets from climate change. He has previously led sustainability, risk and strategy functions in the transport and higher education sector.

Hunter Water Community Panel

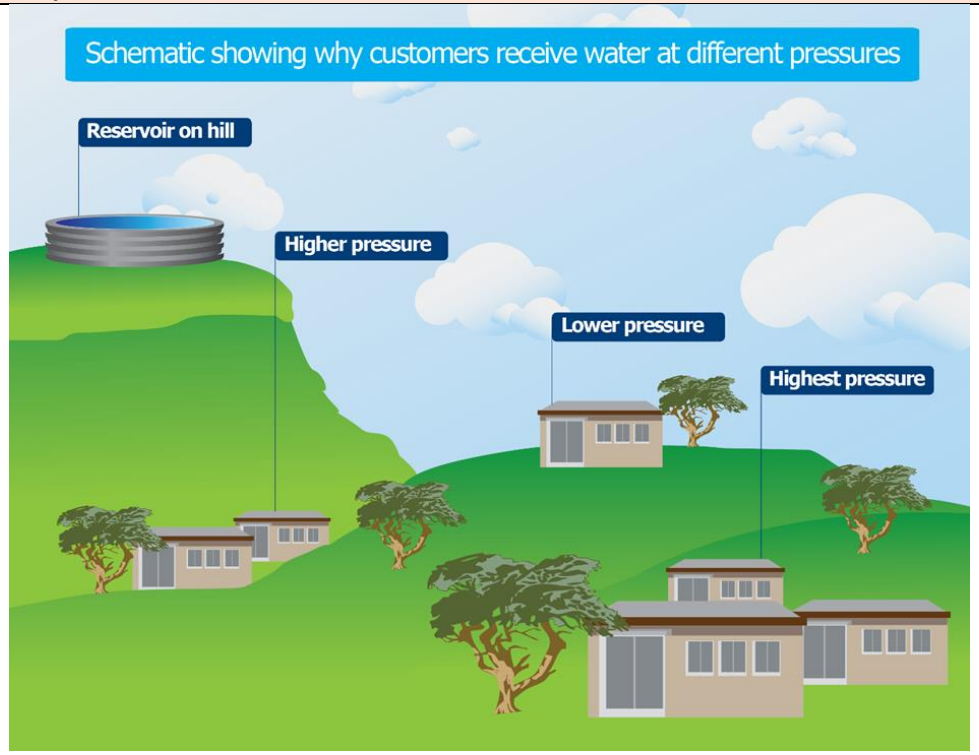
Day 1 Questions and Answers

Topic: Hot spots

Question	Response
How or why do we have cracks in sewer pipes and what are you doing to treat and fix them? How much money is needed to fix them?	On behalf of the community, Hunter Water manages an extensive network of more than 5,300 kilometres of wastewater main – that's further than from Newcastle to Perth. While we constantly invest in upgrades, replacements and improvements, pipes, like any asset, do deteriorate and cracks will emerge over time. In some cases, weather conditions can cause breaks to occur. In periods of excessive dry weather, tree roots reach deeper into the soil, in search of water. This can cause tree roots to enter (and break) our pipes. In extended periods of both wet weather and dry weather, soil can expand and contract, leading to added pressure on pipes nearby. This can also result in cracks and breaks. We undertake regular maintenance on our pipes, to minimise breaks and cracks. We also replace sections of old pipes proactively, to reduce the chances of breaks. Sometimes, we can't proactively prevent a break or crack and we need to replace pipes unexpectedly. The total cost of fixing cracks and breaks in the wastewater system can fluctuate in any given year, as weather conditions can be a significant factor in increasing the occurrence.
Why doesn't Hunter Water check people to know when they are in a smelly area?	Hunter Water customers regularly report issues with odour and smells for investigation. We take these reports seriously, and our team of technicians follow up on possible breaks to ensure issues are identified and resolved. Wastewater odours can be difficult to measure for several reasons: - We measure smells regularly around wastewater treatment works, but we would need lots of sensors across the area we serve to cover all possible sources of smells. Our wastewater system involves more than 450 pump stations and 5,300km of pipes. - Some people are more sensitive to certain smells than others. - Bad smells from our wastewater system tend to come from hydrogen sulphide (sometimes called "rotten egg gas").

Question	Response
	- Whether a particular person or household is affected by a bad smell can depend on which direction the wind is blowing. - People can think the bad smell is coming from the wastewater system but sometimes it isn't e.g. stagnant stormwater. We regularly monitor areas that are brought to our attention for having an odour issue with odour loggers. We also have regular maintenance inspections that can confirm or impart knowledge on whether an area is experiencing odour issues. Our field staff attend pump stations regularly - if we have a pump station change behaviour for any reason, we investigate to understand that issue. When we can, we respond to odours through odour reduction measures. For example, we'll fit activated carbon filters at our wastewater pump stations to mitigate odour issues. Activated carbon filters are like odour magnets. They have a lot of tiny pores that grab onto smelly molecules in the air and trap them. So, when air passes through these filters, the bad smells stick to the carbon.
Is the quality of water at our tap impacted by old pipes? How is that measured and controlled? Some of the pipes are over 100 years old. How do we know the water is of good drinking water quality?	The safety of our water is paramount and we take a holistic, preventative multiple barrier approach to managing its quality in compliance with the Australian Drinking Water Quality Guidelines. We have an extensive monitoring program that tests for a wide range of physical, chemical and biological characteristics at all stages of the supply system, from catchment to tap. This includes 74 monitoring locations throughout our water network to monitor the water provided to our community. This year we took 24,215 samples for 146,145 laboratory tests. Drinking water supplied by us is consistently of a very high standard and meets the requirements of the Guidelines. We also work closely with NSW Health to ensure that all current and emerging issues associated with drinking water quality are identified and assessed. You can read more about our approach to ensuring high-quality water supply here on our website.
Customers do not complain about hot spot issues (they think it's normal). Are your customer numbers and percent of impacted customers correct?	The number of customers impacted by each type of hotspot is as accurate as possible, but we acknowledge there would be customers experiencing hotspot issues that we are unaware of. Low-pressure and wastewater overflow hotspot numbers are based on a data estimation model. We analyse the amount of complaints we receive for wastewater overflows compared to the number our model produces, to ensure modelling accuracy.

Question	Response
	For odour hotspots, we can only identify these issues through customer complaints. We know that if one customer complains in a location about odours, it will almost certainly impact surrounding customers. We then use odour loggers to confirm which customers are impacted.
If Hunter Water is not responsible, is there overlap with councils or owners? Who is ultimately responsible for this?	Overflows can be caused by a range of factors including breaks and blockages within the wastewater system, geographical or topographical impacts, or stormwater illegally connected to sewer pipes. This can be caused by natural causes (ground movement and tree roots), blockages (including due to the flushing of wet wipes) and the connection of stormwater downpipes to the sewer system (known as 'illegal connections'). In the case of illegal stormwater connections to the wastewater (sewer) system, private property owners are often unaware of the issue. Hunter Water undertakes smoke testing in response to overflows to try and detect these types of problems and we notify property owners when we find a problem.
Can we explore scaled rebates for people in hot spots in accordance with how they are impacted? Instead of, or in conjunction with, actually rectifying the physical issue?	Yes, that is an option that can be explored by the Community Panel. A list of our current rebate amounts and eligibility criteria is set out on our website. These were last reviewed in 2021-22 and are set out in the Customer Contract that goes with our Operating Licence (issued by the NSW Government and administered by IPART). A description of how we determined these rebates is provided in our response to IPART's Issues Paper for Hunter Water Operating Licence Review, Oct 2021, available on IPART's website. See pages 31 to 47.
What are the demographics of those located in the affected areas of the three hot spot types?	There are no common demographics for affected customers. As described in the learning day session, those who live at the top of a hill may experience lower water pressure due to topography and distance from the nearest pumping station. Properties that are on an elevation similar to a reservoir will receive a lower pressure because the pressure is based on the difference in height between the reservoir and the customer's tap. A pumping station can be used to increase pressure, so properties closer to a pumping station receive higher pressure. Once the pumped water moves through a network of pipes, the pressure reduces due to friction, so properties further from the pumping station receive lower pressure.

Question	Response
	 Customers who live next to wastewater pump stations and wastewater treatment works are more likely to be affected by bad smells than people who live further away from these assets. Extra water can get into wastewater pipes from rainfall, stormwater being illegally connected to sewer pipes (this can be without the current homeowners' knowledge), or rainfall running into the joins in the pipes or cracks caused by tree roots. Where this happens depends on a lot of factors.
Would like testimonials and case studies or videos from actual customers in hotspot areas on impacts of living in a hotspot: - How do it impact quality or living? - Potential long term health impacts - Cost of buying water or repairing property	We can provide this during the deliberative forum sessions next year.

Topic: Carbon reduction

Question	Response
Are the timelines flexible?	Yes, timelines to reach net zero are flexible. This is part of what we would like the Community Panel to tell us - when do you believe we should reach net zero? The timeline options we provided in the bill simulator survey were 2030, 2035 and 2050. However, the Community Panel could recommend other dates. The latest date, 2050, was based on meeting the NSW Government's state-wide target. Hunter Water can reach net zero by 2030. It's also possible for Hunter Water to reach net zero at a later date if that is recommended by the Community Panel. It is noted Hunter Water has adopted an existing net zero target of an 80% reduction in Scope 1 and 2 emissions by 2030 (compared to 2020-21 levels) and to be net zero by 2035. This position was adopted by Hunter Water's Board on the basis it would be tested through customer's willingness to pay within the context of overall investment needs and bill impacts.
Is it possible to use methane to power the treatment plants? Could this be a possible cost reduction?	We have previously considered and explored this option. Hunter Water's Wastewater Treatment Works use aerobic digestion, which does not generate significant volumes of methane gas. There are significant costs and technological challenges to change this existing treatment process from aerobic digestion to anaerobic digestion to enable the generation of methane gas. For Hunter Water's existing system, there are lower-cost mechanisms for reducing emissions. There is one exception to this statement – Hunter Water has one anaerobic digestion plant: the Cessnock Wastewater Treatment Plant, which has a cogeneration facility. The biogas produced by the digester is ignited within the cogeneration facility and the energy generated is used to generate electricity. The heat generated from the process is also used to heat the digester and in turn, reduces treatment energy costs. The facility is estimated to reduce carbon emissions by 170 tonnes a year.
What means do you have to reduce emissions by 25% by 2030?	The two primary options we have to reduce our carbon emissions before 2030 are purchasing renewable energy to power the planned desalination plant, and purchasing carbon offset certificates to reduce our direct emissions.

Question	Response
	Purchasing carbon offset certificates is the only available option to reduce the emissions created directly from our wastewater treatment plants and our heavy vehicle fleet in the short term because there are no viable technology solutions currently available. A carbon offset certificate represents a reduction or removal of carbon emissions made elsewhere to compensate for our emissions (for example, purchasing credits that plant trees that remove carbon from the atmosphere).
How is carbon usage measured when it's from your cars, electricity consumption, wastewater treatment etc.	Hunter Water's carbon footprint is calculated by converting a range of energy consumption activities into a carbon dioxide equivalent metric measure. This is done following a consistent methodology set by the Commonwealth Government for all major Australian businesses. Hunter Water is required to report its greenhouse gas emissions and renewable energy generation in accordance with the National Greenhouse and Energy Reporting (NGER) Scheme. This process includes electricity consumption, fuel use and fugitive emissions from wastewater treatment. Different greenhouse gases (eg methane, nitrous oxide) are converted based on their global warming potential in carbon dioxide equivalents. This information is available publicly through the National Performance Report, which is published annually by the Bureau of Meteorology. The calculations used for converting fuel and electricity into greenhouse gas emissions are outlined in the NGER measurement determination which is updated annually from state and national emission factor databases.
Where is the power coming from with the future net zero renewable energy?	Hunter Water recently entered into an electricity supply contract with AGL for the period 2025-2031 which includes a transition to 100% renewable energy by 2030 (excluding the operation of the proposed desalination plant). The renewable energy component of the contract will be sourced from the Silverton Wind Farm in NSW. We are also delivering an onsite renewable energy generation program which installs solar panels at our treatment plants and pump stations where it is economically viable to do so. The program is projected to supply around 20-25% of our energy demands by 2030.
Are there any incentives/rebates provided by government to assist Hunter Water with costs of carbon reduction? What and how much?	Hunter Water is not currently using any government incentives and rebates to assist us with the costs of carbon reduction. There are government incentives and rebates to reduce some industrial

Question	Response
	emissions and Hunter Water keeps a watching brief of their application to our operations and investment needs.
Are the targets similar to Hunter Water's peers (here or overseas)?	There are a range of carbon targets across the Australian water industry. In terms of achieving net zero emissions across their business (their scope 1 and 2 emissions), other water utility targets include: - Sydney Water and SA Water in Adelaide, South Australia have committed to achieving net zero by 2030 - All of Victoria's major metropolitan water utilities have emissions reduction obligations under Victorian legislation to achieve net zero by 2030. - Water Corporation in Perth, Western Australia has a goal to achieve net zero greenhouse gas emissions by 2035.
How do Hunter Water targets compare to similar industry benchmarks?	The above question reflects carbon reduction target benchmarks. Benchmarking electricity use and carbon emissions across water utilities is difficult. As an indication, Hunter Water's emissions are about average amongst other large urban water businesses providing services to more than 100,000 properties. Hunter Water is often compared with Sydney Water. Sydney Water emits around 350,000 tonnes of carbon per year, but Sydney Water is around 8 times larger than Hunter Water. - For every 1,000 connected properties, Hunter Water emits around 300 tonnes of carbon. - For every 1,000 connected properties, Sydney Water emits around 170 tonnes of carbon. Energy use per 1,000 properties can differ between water utilities due to things like housing density (more or less connected properties per km of water main or sewer), how close or far away the water comes from, how much the water needs to be treated to get to drinking quality, how much wastewater needs to be treated before being discharged (depending on the sensitive, or fragile, the environment is where treated wastewater is discharged), and the type of treatment process used.

Topic: Water conservation

Question	Response
Use less water	
Would effective water conservation mean a reduction in revenue, more difficulty meeting costs, and so a rise in the price of water to customers?	To some extent yes. However, water prices reflect both Hunter Water's variable costs as well as fixed costs. If less water is required by our community, some of Hunter Water's costs fall (for example, less energy is required at our Water Treatment Plants). Some costs are fixed and do not change significantly based on the volume of water required by our community (for example, the cost of maintaining the water pipe network). This variability is reflected in the IPART regulatory process. When we propose our prices to IPART, we provide a forecast of how much water we expect our customers will use during the price period. We call this a 'demand forecast'. The demand forecast volume is used to calculate our total water revenue requirements. If our customers use less water than we forecast during a period, this means we will have a reduction in revenue during the period. Even if we didn't consider water conservation, there is natural variation each year due to changes in the weather. Our forecast is generally based on average weather conditions. When it's hot and dry, most residential customers use more water outdoors. When it's wet, they tend to use less. Over the 5 years that prices are set, the variations due to the weather tend to even out. In the following period, when prices are reset, we include a new estimate of how much water we would expect our customers to consume based on the most current consumption trends. If we assume that our revenue requirement (to recover our costs) stays the same, the lower water sales would result in an uplift in water charges to meet revenue needs. There are a couple of safeguards in place to protect our customers: 1. IPART undertakes an independent review of the demand forecast volume in our pricing proposal to make sure it is reasonable. If we overestimate the volume, then the fixed water service charge would be set too low. If we underestimate the volume, then the fixed water service charge would be set too high. 2. IPART has a method in place to make adjustments between price resets if there has been a big difference between the demand forecast volume used to set prices and the actual demand volume. For example, if we sell a lot more water than forecast, we need to give some of that money back to customers in the following pricing period (at the next price reset).

Question	Response
	3. IPART's new 3Cs framework looked at ways to incentivise more water conservation. One way it can do that is by allowing water businesses (like Hunter Water) to agree with customers and the community on targets for the level of water conservation. There could be rewards if we do better than those targets and punishments if we do worse. We are planning to talk about this with the Community Panel later in the deliberative process.
What is being done to educate the youth about water conservation?	Hunter Water has 3 key programs that teach children and young people about the importance of water conservation and what they can personally do to use less water at school and home. Programs have been designed to align with the NSW curriculum and support compulsory units of work. - Our Young Water Warriors program is a half-hour workshop for 3-5 year olds in preschools and daycares that introduces children to the natural water cycle, water-saving tips and the importance of only flushing the 3 P's (pee, poo, paper). - The Let's Love Water show is a STEM-based show that incorporates song and humour to teach K-2 students about the water cycle and how they can make sure they aren't wasting water. This show is performed at 80 schools annually. - Stage 4 students (years 7-8) studying Water in the World have the opportunity to participate in a field day with Hunter Water and Local Land Services to better understand how water is managed in our catchments and our networks. Students learn that water is a finite resource that needs to be managed effectively by Hunter Water as the utility, and used sustainably by residential and non-residential consumers. Our education program reaches over 6,000 students annually. We also have a community-wide water literacy program that enables us to have deeper richer conversations about our water future.
What needs to be done to increase the current infrastructure to meet future requirements for water targets and at what cost e.g., dollars, carbon emissions?	There are a variety of options for securing our water supply for the future. The Lower Hunter Water Security Plan (LHWSP) provides an analysis of these options and charts a course for securing our water supply to 2060 and beyond. In short, we need to ensure we make the most of what we already have through water conservation and recycled water, but we also need to increase and diversify our water supply sources. A key contributor towards securing our water supply for the future is the planned Belmont Desalination Plant. The plant will provide a climate-independent source of water - diversifying our water supply options and providing up to 15% of our region's average annual water supply.

Question	Response
What is Hunter Water doing to encourage less water use?	We undertake a mix of targeted programs and partnerships to encourage our customers to conserve water. Our 'Love Water' campaign seeks to bring about awareness and behavioural change in our customers. We deliver tips on 'how' to save water through a variety of media channels, including television, digital and radio. We encourage water conservation through the following programs: - Our education program, reaches over 6,000 students annually. - Smart Water Choices, a set of permanent water conservation measures that encourage behavioural changes in our customer's water-use activities. - Ongoing participation in community events to deliver the message of the importance of saving water, and maximising visibility to the community. We also have several initiatives targeted at non-residential water conservation, including: - The installation of over 400 data loggers at hospitals, schools, council and business sites across our area of operations to assist with early detection of leaks and irregular water use. - Assisting over 200 large and major non-residential customers to develop a Water Efficiency Management Plan (WEMP) to help identify water savings that can be achieved through improved operational processes, leak repairs, fittings upgrades, cooling tower and irrigation system improvements and the use of alternative water sources. - Collaboration with the six local councils in our area of operations to help make the region more water resilient, through actions such as the roll-out of a best practice guide for turf management to assist councils in reducing water use without compromising the aesthetics and functionality of parks and sports fields Every year, we publish a report that details our performance in relation to water conservation. The 2022-23 Water Conservation Report is available on our website. You can also read more about our approach to water conservation as part of the Lower Hunter Water Security Plan here.

Question	Response
Should big business help subsidise water conservation for households and vulnerable customers?	Hunter Water adopts 'postage stamp' pricing. All customers pay the same amount per kilolitre of water supplied, regardless of whether they are a residential household or a large industrial business. The intent is to ensure fairness between different customer groups. Business water bills are typically much larger, however, as they use more water than a residential property. IPART's best practice pricing principles (2018) state that prices for each service should reflect the efficient cost of delivering them and the cost of servicing each customer type (i.e. no cross-subsidies between water, wastewater and stormwater customers, and no cross-subsidies between residential and non-residential customers). Hunter Water has been phasing out a historic discount for some large business customers previously applied based on their location. From 1 July 2025, this historic discount will be fully removed.
Fewer leaks	
Can the future supply challenge be partially solved by further leak reduction?	Yes, reducing leaks is part of the solution to the challenge. One of the key priorities included in the Lower Hunter Water Security Plan (LHWSP) is 'Making the most of what we've got' – this includes investing in reducing leaks in our network. The LHWSP includes a target to reduce leakage in our network from 67 litres per connection, per day to 50 litres per connection, per day by 2025. We're already investing in programs to reduce leaks in our system As we reduce leaks, they become more difficult (and costly) to find and repair – there is an economic law of diminishing returns. How much more we invest in finding and fixing leaks is a topic we want to explore with the Community Panel.
How much water was saved between 2015/16 and 2020/21 in ML or GL? [Answer: 2.46L per year]	Hunter Water reports water savings relative to the baseline customer behaviour (July 2016 to July 2018). The estimated savings allow for the influence of weather on water demand (that is a higher

<table>
<tr><th>Question</th><th>Response</th></tr>
<tr><td>How does that compare to other water savings programs such as water restrictions?</td><td>demand would be expected during hot/dry periods). The following table shows the estimated savings (in ML) for each financial year relative to the behaviour in the baseline period:

<table>
<tr><td>Financial Year</td><td>2018/19</td><td>2019/20</td><td>2020/21</td><td>2021/22</td><td>2022/23</td></tr>
<tr><td>Saving</td><td>1,912</td><td>7,884</td><td>4,677</td><td>4,632</td><td>6,146</td></tr>
</table>

The 2019/20 financial year was strongly influenced by water restrictions.

We publish our water conservation performance annually through our Water Conservation Report – you can view the 2022-23 report here on our website. As part of the report, we analyse our water conservation performance by comparing current water use behaviours by our customers to a baseline calculated from 2016 to 2018. Through conservation efforts, our customer's water use is 10% lower than would otherwise be expected.</td></tr>
<tr><td>So if 10% of water use is leaks/loss in Hunter Water’s systems and pipes, and the cost recovery for that is our bills, how can we subsidise our bills? Perhaps take 10% off our water use or financial support for fixing residential leaks?</td><td>We do lose around 10% of the water supplied from our treatment plants due to leaks in our network. When talking about the amount of water lost in our system due to leaks, we sometimes refer to 'real losses'. Real losses are actual physical water leaks from a storage system and consist of leakage from tanks, transmission and distribution mains, and service lines up to and including the meter.

We are required to report on the amount of real losses in our system every year, through the BoM's National Performance Report. This report includes a variety of indicators to assess and compare our performance against other Australian utilities. One of these indicators is called 'A10 - Real losses: service connections (L/service connection/day).

A10 essentially measures how many litres we lose from our system for each service connection, per day. This is the most useful way to compare our performance, because other utilities may be larger or smaller, which would influence how many litres of water they lose.

In 2021-22, we lost 67 litres of water per day, per service connection. This is pretty close to the median amount of water lost by other major utilises (66 litres). Sydney Water lost 77 litres per day, per connection. The Lower Hunter Water Security Plan includes a target to reduce leakage in our network from 67 litres per connection, per day to 50 litres per connection, per day by 2025.

In 2019, the Water Services Association of Australia (WSAA) published a report titled 'Reducing</td></tr>
</table>

Question	Response
	Leakage in Australia'. This report outlined that the average amount of litres lost per connection, per day in Australia ranged from 80-100 litres between 2015 and 2017. You can read more about the approach to leakage reduction from other Australian water service providers in the report.
What are the costs of fixing average leaks?	On average, it costs between$2,500-4,000 to fix a break or leak. It's important to consider that the cost can vary significantly from leak to leak, based on factors such as: - What's causing the leak (how badly damaged is the pipe)? - How quickly we can detect and respond to the leak? - If the leak is causing water continuity issues (in which case we need to respond promptly).
How much money can be saved by fixing all the leaks?	When fixing leaks, it's important to consider two key components - the inputs (cost to fix the leak) and the outputs (the value of the water saved by fixing the leakage). Both of these components have monetary value, and when the cost to fix a leak is less than the value of the water saved, it makes financial sense to fix the leak. In these circumstances, we always fix leaks when there is a net financial benefit. We are seeking the panel's input on whether we should go above the economic value of fixing leaks.
Recycled water for business and industry	
What percentage of usage is industry versus residential?	In 2022-23 we supplied 6679 megalitres of recycled water in total to residential customers and non-residential customers (which includes industrial and agricultural use). In 2022-23, we supplied around 78 megalitres to residential customers and 6601 megalitres to non-residential customers. Therefore, 98.8% of use was by non-residential customers and 1.2% was by residential customers.
Do businesses get offsets? Residential homes don't.	We assume this question relates to the prices that customers pay for recycled water. We also assume that "offsets" means a subsidy or cross-subsidy from other customers. We apply IPART's cost recovery framework for recycled water schemes: - Least-cost schemes, which are the least cost means of providing water or wastewater services, are treated on an equivalent basis to traditional network schemes and funded through periodic charges to the broader water and wastewater customer base. That is, water and wastewater customers pay no more than if the recycled water scheme didn't exist. Examples of these providing recycled water to local farmers near our wastewater treatment plants. - Higher cost schemes - we are not allowed to provide a subsidy from water and/or wastewater

Question	Response
	customers except in certain circumstances, like when the recycled water scheme means we can make other infrastructure smaller or build it later, or when customers explicitly tell us they're comfortable paying a subsidy. Currently, all residential customers contribute towards the cost of a council irrigating a sporting field with recycled wastewater. Our proposal was based on a willingness to pay survey of customers in 2018 and it was reviewed by IPART. The charge is less than $2 per household per year. This is the type of situation where we are asking the Community Panel for a recommendation. Customers and the community might be comfortable paying a subsidy if they get a "liveability" benefit (a bit like helping pay for a community library even if you don't use the library yourself). See also our response to the question *"If council uses the water, aren't they incurring the cost? Therefore, is it included in our rates?"*
Does industry pay the same amount per kilolitre? If not, why? How is it determined?	In relation to prices for drinking-quality water, see the above response to the parking lot question on prices that includes the Community Panel member comment *"Conversely, large water users are getting a free ride on the back of the exorbitant fixed charges levied on households."* In summary, we are phasing out the 'location-based' prices that include a discount for water use that was available to certain customers for usage exceeding the first 50,000 kL of water used per year. From 1 July 2025 all water users will pay the same water usage price per kilolitre of water they use each year. In relation to recycled water, the prices paid by customers per kilolitre varies depending on a range of factors, such as the quality of the recycled water and whether the recycled water scheme means we can save money elsewhere in our system (e.g. if it's the least cost way of meeting an environmental requirement for discharge from our wastewater treatment plant). We are not allowed to cross-subsidise recycled water from other customer charges except in very specific circumstances. In those circumstances, IPART checks and approves or changes the cross-subsidy.
Recycled water for community greening	
Does recycled water cost more to produce? What is the cost per litre?	*See response to the question 'What's the difference in the cost of stormwater / wastewater and drinking water'?*
What's the difference in the cost of stormwater / wastewater and drinking water?	Recycled water is more expensive to produce and supply than normal drinking water in most circumstances.

Question	Response
	Recycled Water can be treated to be suitable for different non-drinking end uses. The higher the level of exposure for customers the higher the level of treatment required. Recycled water used for washing machines, toilet flushing, watering lawns and gardens and ponds and water features end uses, also referred to in some parts of Australia as 'Class A' recycled water, has a higher quality than water used for irrigating public spaces and sporting fields, dust suppression and irrigation for agriculture. The cost of the recycled water projects ranges from $0.40 to $15 per kilolitre. The cost of recycled water for non-drinking is relatively high cost because while this option includes lower-cost projects that use recycled water for agriculture and industrial processes, it also includes higher cost projects including where pipework is duplicated to provide recycled water to households, to keep it separate from potable water supply. The median cost is around $4.35 per kilolitre. We source most of our water from surface sources (our dams) and groundwater (our sandbeds). You can read more about our water supply sources here. Supplying water from dams ranges from $0.25 to $2.94 per kilolitre. Supplying water from groundwater sources costs between $0.10 to $7.00 a kilolitre, but is typically closer to $2.00 a litre.
Is there a difference in costs between recycling stormwater and recycling wastewater?	The costs of recycling stormwater and recycling wastewater are expected to be comparable. The WSAA 'All options on table' publication gives a band of $0.60 – $33.00 per kilolitre for stormwater. Recycling stormwater and recycling wastewater require a similar level of treatment because both types of water contain contaminants that need to be removed before it can be reused. Stormwater typically comes in contact with various pollutants like sediment, debris, chemicals, and pathogens as it runs off roads and other surfaces in urban areas. This water needs to undergo treatment to remove these pollutants and make it safe for reuse. Similarly, treatment effluent is the wastewater that has gone through the treatment process in a wastewater treatment plant. While the treatment process removes a significant number of contaminants, it may still require further treatment to meet the standards for reuse.
If council uses the water, aren't they incurring the cost? Therefore, is it included in our rates?	It depends. If Hunter Water provides recycled wastewater for the greening of parks and sporting fields, one option would be for the council to pay the full cost, either as an upfront amount or a usage charge or a combination of both. Theoretically, the council would recover the cost via council rates.

Question	Response
	What makes this a challenging problem is that drinking-quality water costs the council $2.89/kL and sometimes we'd need to charge more than $2.89/kL to recover the costs of making the right quality recycled wastewater for council to use on parks or sporting fields. Let's say, for example, that we'd need to charge $3.50/kL to recover our costs. When we're not in a drought, council might not want to pay $3.50/kL. They'd use drinking-quality water instead and save $0.61/kL. Then if we go into drought and water restrictions means they can't use drinking-quality water, they'd want the recycled water. What do we do? If they don't use the recycled water in drought and non-drought, we'd never recover our costs. If we wait until we're in drought to build the infrastructure needed to give them recycled water then the drought will probably be over by the time it's ready. That's why we need your help. In situations like the example above, who should pay the extra $0.61/kL? Should it be the Council? (they might not use the recycled water and the sporting field goes brown) Should it be all customers? Should it be a combination of both? Or should we just not do this type of recycled water project if we can't recover our costs for $2.89/kL or less? We're planning to do a deep dive into this problem on Day 4 in March 2024.
Can bore water be used in public spaces for greening where possible?	Bore water can be used in public spaces for greening in locations where it is available and of a suitable quality. Bore water is not available everywhere as it is typically found in underground aquifers. The quality of the water available in aquifers varies, and it can contain high levels of salts, impurities or other contaminants that would affect plant growth and makes it unsuitable for irrigation. Some Councils and other irrigators in the Lower Hunter are already using bore water in locations where it is available, of a suitable quality and an appropriate access licence is in place. The NSW Government manages licenced water use and compliance in NSW, which includes the access and use of groundwater.
How does our rate of recycling compare to other water providers?	Our level of water recycling is consistent with other water utilities: In total, we supply approximately 6700ML of recycled water per year. Another way of looking at this is as a percentage of the total wastewater collected. This number does fluctuate in any given year, but is typically between 8 and 11%. Every year, the Bureau of Meteorology publishes the National Performance Report. This report details

Question	Response
	the comparative performance of water service providers across Australia, through a variety of indicators. We report on the volume of recycled water in this report. The National Performance Report groups water services providers based on their relative sizes - Hunter Water is considered one of 15 'major utilities' in Australia. For the percentage of wastewater collected that is recycled in 2021-22, the median percentage among major utilities was around 9%.
How much wastewater is recycled at Hunter Water compared to peers?	Please see the response to the question '*How does our rate of recycling compare to other water providers*'?
Is there going to be a point in the future where is costs less to use recycled water? (i.e. the cost of not using it becomes greater)	There are several cases in the past where recycled water schemes have been implemented where they were the cheapest option. In these cases, reusing wastewater for uses such as agriculture, or industry avoided the need or reduced the costs of upgrades to our wastewater treatment plants needed to meet licence conditions for discharging to the environment. Where these situations arise in the future, Hunter Water would pursue recycled water solutions as they represent the least cost servicing option. Purified recycled water (which means treating wastewater to a standard that's safe for drinking), or PRW, could be a more cost-effective recycled water option. The overall cost of PRW is dependent on avoided costs of wastewater investments. PRW also requires the acceptance from the broad community and the approval of NSW Health to use in our drinking water system. PRW has been shown to represent the best long-term value to customers in Sydney in terms of meeting customers' water and wastewater needs, as outlined in Sydney Water's Long-Term Capital and Operational Plan (LTCOP). The Lower Hunter Water Security Plan includes actions to support engagement with our community on this water supply option as a potential longer-term water supply option for the Lower Hunter. Tighter regulatory requirements and/or higher environmental value for the receiving water that effluent is discharged to can result in higher wastewater infrastructure costs, which means the cost of using recycled water becomes more attractive in comparison. Some cost improvements for the production of non-drinking recycled water may result from advancements in technology or increased economies of scale if recycling becomes more widespread. However, a large part of the costs are associated with civil infrastructure (i.e. pipes, pumps, etc) and

Question	Response
	these are less likely to see reductions over time. It is highly unlikely that we will experience cost reductions that have been seen for technologies like solar panels and lithium batteries.
Desalination plant / dams	
How much more expensive is it to provide desalinated water?	The Water Services Association of Australia (WSAA) is a non-profit organisation that aims to enable the exchange of information between industry, government and the community, and to promote sustainable water resource management. WSAA has published a report titled 'All options on the table - urban water supply options in Australia'. This report analyses and compares urban water supply options in Australia, including desalinated water. The levelised cost per kilolitre (the cost required to build the plant and supply the water) ranges from $2.00 to $6.00. The same report also provides an analysis of the cost of supplying surface water (from dams and rivers) and groundwater (for example, for sandbeds). The levelised cost for supplying surface water ranged from $0.25 to $2.94 per kilolitre. The levelised cost for supplying groundwater ranges from $0.10 to $7.00 per kilolitre. It is important to note that there are other benefits to desalination compared with both surface and groundwater: desalination provides a rainfall-independent source of water, which is not vulnerable to drought.
Desalination plant – what is the cost per litre / kilolitre?	See the above response to the question *"How much more expensive is it to provide desalinated water?"*
What powers the desalination plant?	The desalination plant will be powered by electricity from the electricity grid. Part of what the Community Panel is being asked is whether the electricity being used by Hunter Water should be entirely sourced from renewables, which would reduce our net carbon emissions, but may come at a higher cost to customers.
What happened to the Tillegra Dam proposal? Why was it scrapped?	The Tillegra Dam project did not receive planning approval to proceed due to several factors, including • an unacceptable level of uncertainty over the potential impact on the environment, particularly the Hunter Estuary and its internationally-recognised wetlands; • potential impacts on licensed water users; and

Question	Response
	• insufficient justification that the dam was the best way to improve the bulk water supply for the region. In April 2022, the Lower Water Security Plan (LHWSP) was released. The LHWSP charts a course to improve water security in the Lower Hunter by reducing the amount of water we use and increasing the of water we can supply through new water sources. Implementation of the LHWSP will result in a secure water supply for our region to 2060 and beyond.

Topic: Methodology

Question	Response
Why was the survey feedback re-weighted? How was it done?	The average survey figures in the Engagement Report have been modified so that they more accurately represent the real community sentiment. A common (and reasonable) concern is that only “water warriors” would fill out surveys like these, so that the results aren’t representative of the whole community. We wanted to make sure that the results weren’t “hijacked” by only people who were “passionate about water”. We compared the level of interest in water of the people responding to the Bill Simulator with the general population. There were more customers “very interested in water” responding to the Bill Simulator than in the general population, yet fewer customers with “close to zero interest in water”. The data have been re-weighted to better represent the whole community. The same process was undertaken in the priorities survey.
Is Hunter Water going to give us a list of proposals so we can say yes, no, maybe?	We are asking for your (the Community Panel's) recommendations on 3 topics. Across the 3 topics, we've listed 15 guiding questions (see pages 38 and 39 of the Engagement Report). We are planning to do a 'deep dive' into one topic each day on days 2, 3 and 4. On the day, we will provide examples (options) along with the revenue requirement for each. We will also provide you with an easy way to see the impact of different levels of revenue requirement on bills for various types of customers. You can recommend one of those options, but you can also recommend something else (e.g. something in between the options). We will not necessarily tell you which option we prefer because we don't want to bias your deliberations. As an example, on day 2 we are planning to go into detail about hot spots. In the Engagement Report (pages 42 and 43) you will see 6 options. At the end of day 2, we will be asking the Community Panel to start drafting recommendations. The recommendations may include one of the 6 options, nothing at all, or more than any of the options presented.
Did Hunter Water consult the largest water users? Who are they?	We have just over 200 large customers - defined as those customers who consume greater than 10 million litres per year. This equates to about 20% of our total supply into the network. The industries listed below are significant water consumers: • Manufacturing • Accommodation

Question	Response
	• Energy • Mining • Healthcare • Retail • Education Engagement with our large customers is through a dedicated account manager who meets with them 6-10 times per year. We also engaged with small/medium business customers through focus groups and over 50 one-on-one interviews as part of our engagement to inform the pricing proposal.
What was the decision-making around only including two commercial operators?	We used a specialist recruiter to form the Community Panel in a way that meant that the demographic characteristics of Panel members are generally in the same proportions as the Lower Hunter community. Where possible, those proportions were based on 2021 ABS Census data. When this wasn't possible, it was based on Hunter Water data. 95% of Hunter Water's customers are households (residential) and 5% are businesses (non-residential). This is based on the number of properties that receive our services, rather than water usage. We therefore aimed to have 38 out of 40 members of the Community Panel (95%) that are household water users and 2 out of 40 members of the Community Panel (5%) that are business water users. We also tried to involve commercial operators (businesses) in stages one and two of our customer and community engagement for our pricing proposal. However, we do find it challenging to recruit business participants. There are several reasons why this might be the case: - it is difficult to get to the 'right' person in a business to have a say. - it is difficult to identify the most convenient time for all businesses to participate e.g. some work on weekends, some work evenings, and some only work traditional business hours. - we have good contacts within large businesses but less within small to medium businesses. These types of customers have quite different needs and preferences. e.g. A cafe or hairdresser may find that an interruption to their water supply will stop them from working completely whereas a large business might have a storage tank or backup supply. - a relatively large proportion of small or medium businesses are likely to be tenants (renters) e.g. in a large shopping centre. Since Hunter Water bills generally go to the landowner it can be difficult for us

Question	Response
	to know the contact details of the water users. We are always looking for better ways to engage with customers and the community, so we'd welcome any suggestions you have to help us involve business customers. We've tried advertising on LinkedIn, going to local business chambers, register your interest forms on our website, mail to property addresses, mail to post office boxes, advertising on our website banners, and advertising via Business Hunter.

Topic: Prices and charges

Question	Response
You indicated that about 4% of gross earnings to the corporation owner. Audited accounts show that 48% of gross was paid to Sydney ($182 million). Please explain.	We publish a copy of our audited accounts as part of our Annual Report. You can view our 2022 Annual Report on our website here. Our 2023 Annual Report will be published on our website soon. Hunter Water is legally required to operate like a commercial business – based on the principles of competitive neutrality. This includes operating as efficiently as any comparable business and maximising the net worth of the State's (our Shareholder) investment in Hunter Water. Hunter Water's prices are set by IPART and include an allowance relating to the return on the State's investment, which is reflected in the net profit. Hunter Water has paid a dividend to its shareholder, the NSW Government, every year since it was corporatised in the late 1980s. This dividend reflects a percentage of net profit after tax. In the last financial year, Hunter Water's dividend was $26.9 million, against a net profit of $40.2 million. The table Statement of Other Comprehensive Income reflects the ultimate ownership of Hunter Water (i.e. all of Hunter Water and its assets are owned by the NSW Government as the shareholder). 'Other Comprehensive Income' primarily reflects the change in value of Hunter Water assets each year. This does not represent the dividend paid to the NSW Government.
[Question from Facebook] I am seriously challenged by [Jen Hayes'] answer to the question of how much do the owners of the corporation (State Government) get as a return on investment. Jenny's reply was a very small amount of about 4% of revenue. In fact the amount sent to Sydney last year was 182.784 million dollars. 48%.	Please see the response to the above question.
Do you have flexibility in the structure of prices (metered usage, wastewater vs supply, etc) or does IPART dictate this?	There is some flexibility in the structure of prices. We arrive at our proposal by considering customer preferences, cost reflectivity and customer impacts. Sometimes it is challenging to balance all three factors. We also have a constraint (limitation) that makes us a bit different to some other water providers, including many in other States. Our revenue requirement for water services has to be recovered from water charges and our revenue requirement for wastewater services has to be recovered from wastewater charges. We can't mix the two together. IPART considers the same factors when they consider our pricing proposal. It is probably fair to say that

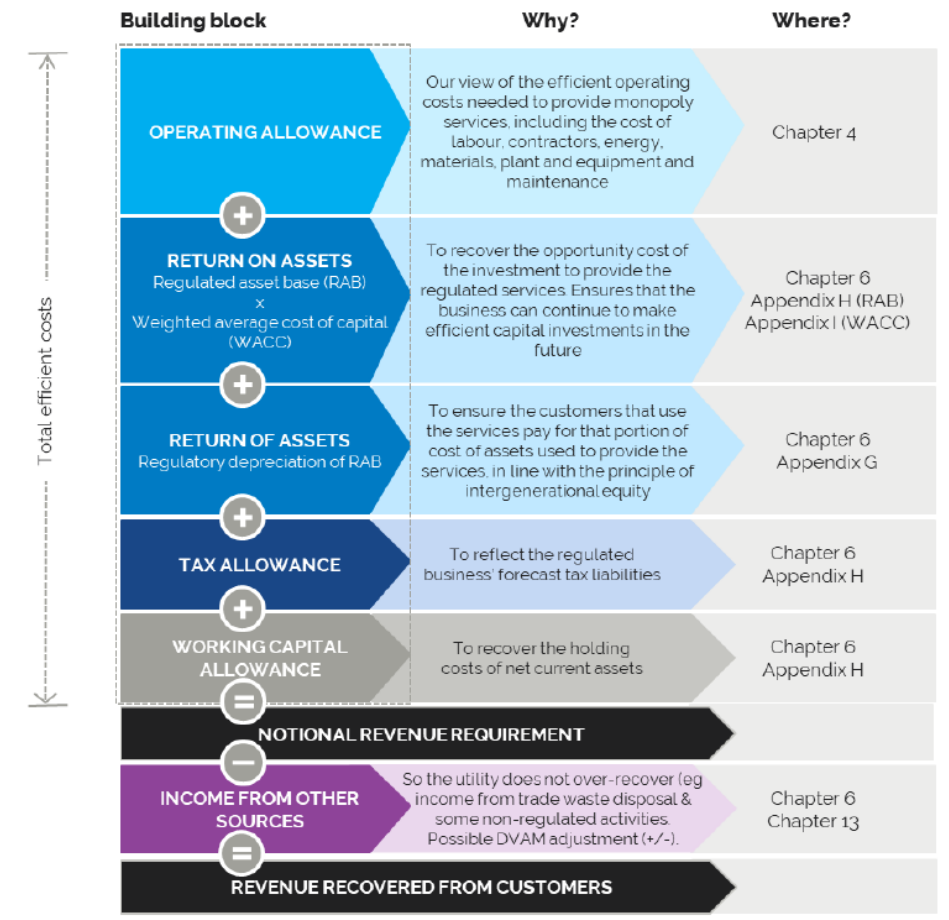
Question	Response
	IPART has some preferred price structures that are mainly based on reflecting the cost of providing services (user pays principle) and sending signals to customers about when their usage is expensive (in terms of the long-term cost for us to provide it). You can see a short (1 page each) summary of how we balanced the different factors in proposing price structures in our last Pricing Proposal (see page 40 for water, page 41 for water for very large water users, and page 46 for wastewater).
Are we able to get access to the pricing of other water corporations? Would like more information on comparable charges for other water corporations.	The National Performance Report is a comparative report that details the performance of water service providers across Australia, through a variety of indicators. The National Performance Report groups water services providers based on their relative sizes - Hunter Water is considered one of 15 'major utilities' in Australia. A number of these indicators relate to pricing. Our customers use on average around 150KL of water per year. The typical bill our customers pay based on this level of usage annually is $1107. The median typical bill among other major utilities (based on their customer's average water usage) is $1102. These totals are for water and wastewater only, and do not include stormwater charges, as these charges are only paid by a sub-section of customers. Customers paying the stormwater charge can expect their bills to be higher. They also don't reflect discounts available to some customers (for example pensioner customers, who receive a pension rebate). The National Performance Report also provides comparative data on the average bill based on a fixed 200kL water usage, on the structure of water service provider charges, in particular 'fixed' and 'usage' for both water and wastewater services. You can find more details about these indicators on the BoM's National Performance Report page.
How do we fair price per litre, compared to other water providers in the state?	There are lots of different water providers in NSW (particularly once we list all councils in country areas). We've therefore only listed a few water usage prices here. However, you can see a full list of water prices in Part B of the National Performance Report published by the Australian Bureau of Meteorology. In terms of NSW urban water providers that are price regulated by IPART, their prices in 2023-24 are: - Hunter Water $2.89/kL in non-drought and $3.39/kL in drought - Sydney Water $2.67/kL in non-drought and $3.61/kL in drought

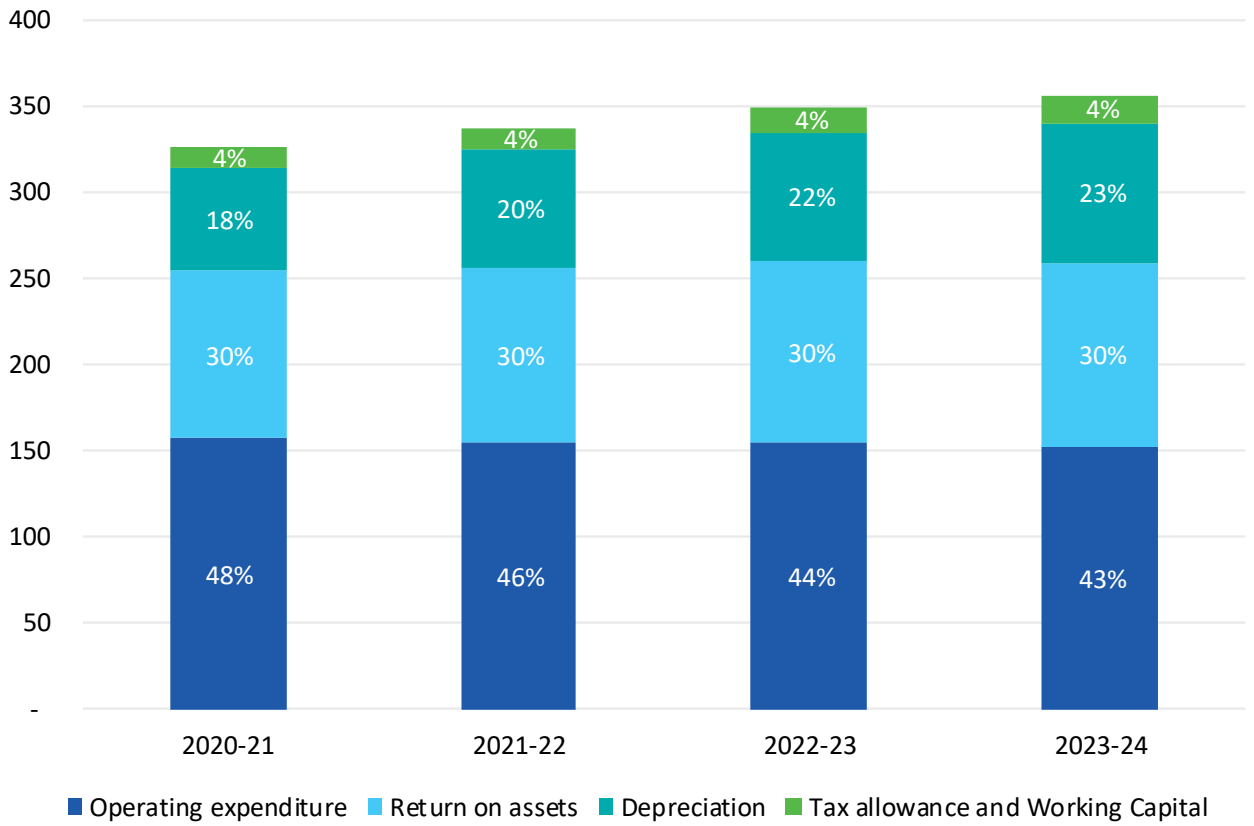
Question	Response
	- Central Coast Council $2.47/kL - Essential Water (Broken Hill) $2.12/kL
Total revenue of Hunter Water, and do they always run at a profit?	Hunter Water's total revenue for the financial year ended 30 June 2022 was $370.4 million. Hunter Water will publish the total revenue for the financial year ended 30 June 2023 as part of the 2023 Annual Report, which is expected to be published on our website soon. Hunter Water operates like a commercial business, based on the principle of competitive neutrality. This includes operating as efficiently as any comparable business and maximising the net worth of the State's (Shareholder) investment in Hunter Water. Hunter Water's prices are set by IPART and include an allowance relating to the return on the State's investment, which is reflected in the net profit.
How are the executives remunerated for the price proposal being approved, without any change to the prices proposed?	Most Hunter Water employees are engaged under an Enterprise Agreement. Some senior managers are engaged on individual contracts and are eligible to receive an annual fixed base salary and additional performance pay for achieving agreed targets. Hunter Water executive remuneration is benchmarked to market remuneration data to ensure high calibre individuals are attracted and retained. In determining remuneration, Hunter Water complies with NSW Government policy. Hunter Water reports annually on senior executive pay in its annual report, which is tabled in the NSW Parliament, and available on Hunter Water's website. Our 2023 Annual Report will be published on our website soon. No Hunter Water employee receives a financial incentive (or disincentive) if changes are made to the pricing proposal, either through engagement with the Community Panel, or by IPART).
What demographic is currently behind in paying their water bills?	The vast majority of Hunter Water customers pay their bills on time. However, there is a growing group of customers with overdue bills. Our analysis indicates that the following residential demographics are particularly struggling: - Low or fixed-income customers (e.g. concession/pension card holders) - Larger family households - Single income families However, over the past 12 months we are seeing an unprecedented increase in the number of working families (two income) falling behind in their water bills.

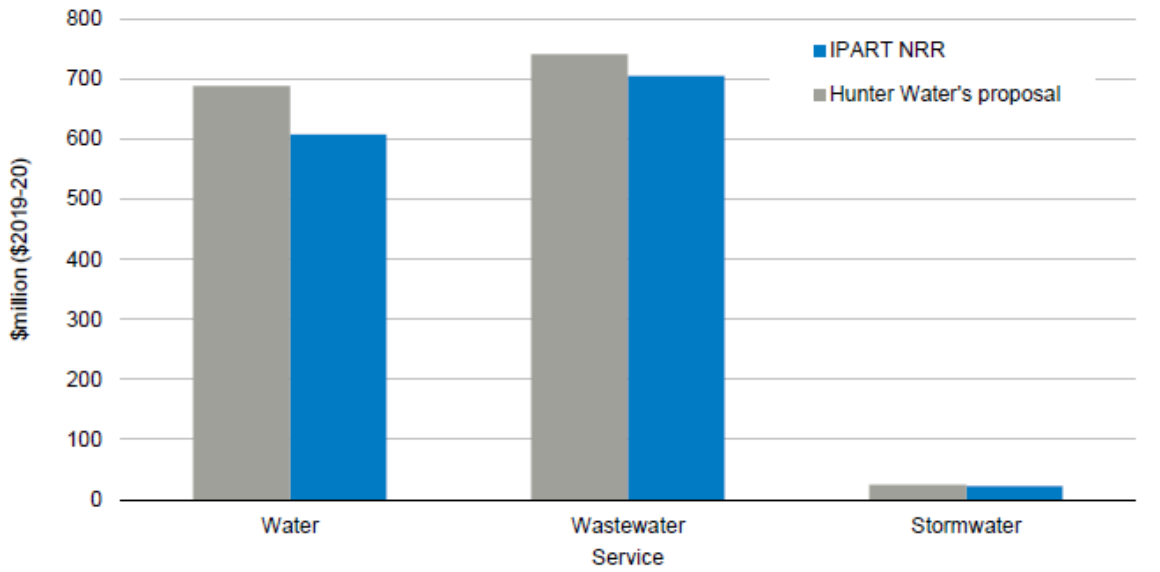
Question	Response
	Hunter Water offers support programs to customers experiencing financial hardship.
Since we are not able to influence the salaries and workforce size of hunter water, please provide examples where your organisation has taken ACTIVE measures to reduce running costs of the business, so that our bills are smaller. How is the business doing their part?	Ensuring that we provide our services to customers at the lowest price possible is important to Hunter Water – we have a sense of social responsibility to the community in which we operate. As a State-Owned Corporation, Hunter Water is legally obligated to operate as efficiently as any comparable business. IPART, our pricing regulator, only allows us to recover efficient costs from our customers through our prices. Our pricing proposal must include cost efficiency targets to ensure we continually find new ways of operating more efficiently each year to keep customer bills as low as possible. Recent initiatives include the installation of solar panels at Hunter Water sites and the use of smart-integrated-pump-scheduling (running pumps at the most efficient times) to reduce electricity costs – these initiatives currently save us around $1m pa (with more solar currently being installed this will increase in the future). Other examples include changes to our maintenance workforce crew sizes, dedicated spoil management, embedding cost efficiency incentives in contracts with our partners to ensure they also operate efficiently (e.g. our contract with Veolia ANZ to operate our water and wastewater treatment plants), changing our banking partner to reduce the fees we pay and continued customer uptake of eBilling to reduce bill printing and postage costs. Furthermore, we judiciously invest in capital projects that lower our running costs – for example replacing sections of trunk mains to reduce the cost of performing repairs.
What are they survey results for variable / fixed prices used to bill customers? Referring to page 21 of the Engagement Report which says “We have previously surveyed customers about…”	We surveyed customers about their preferred mix of water usage and fixed water charges. Respondents were provided with background information and asked to indicate their preferred water usage charge on an interactive 'slider' tool. The corresponding fixed charge and annual bill were shown and changed in real time as respondents moved the price change slider. The bill estimate was based on a level of water usage, which could be changed with another slider. The full survey results are available on our website. See Technical Paper 1 from our 2019 Pricing Proposal. A summary of what we heard and our response is provided on pages 20 and 21. The full findings are provided in Appendix B. As stated in the summary, there are a range of preferences in the community regarding the balance between water usage and fixed charges. In general, people tended to respond to the survey in a way that minimised

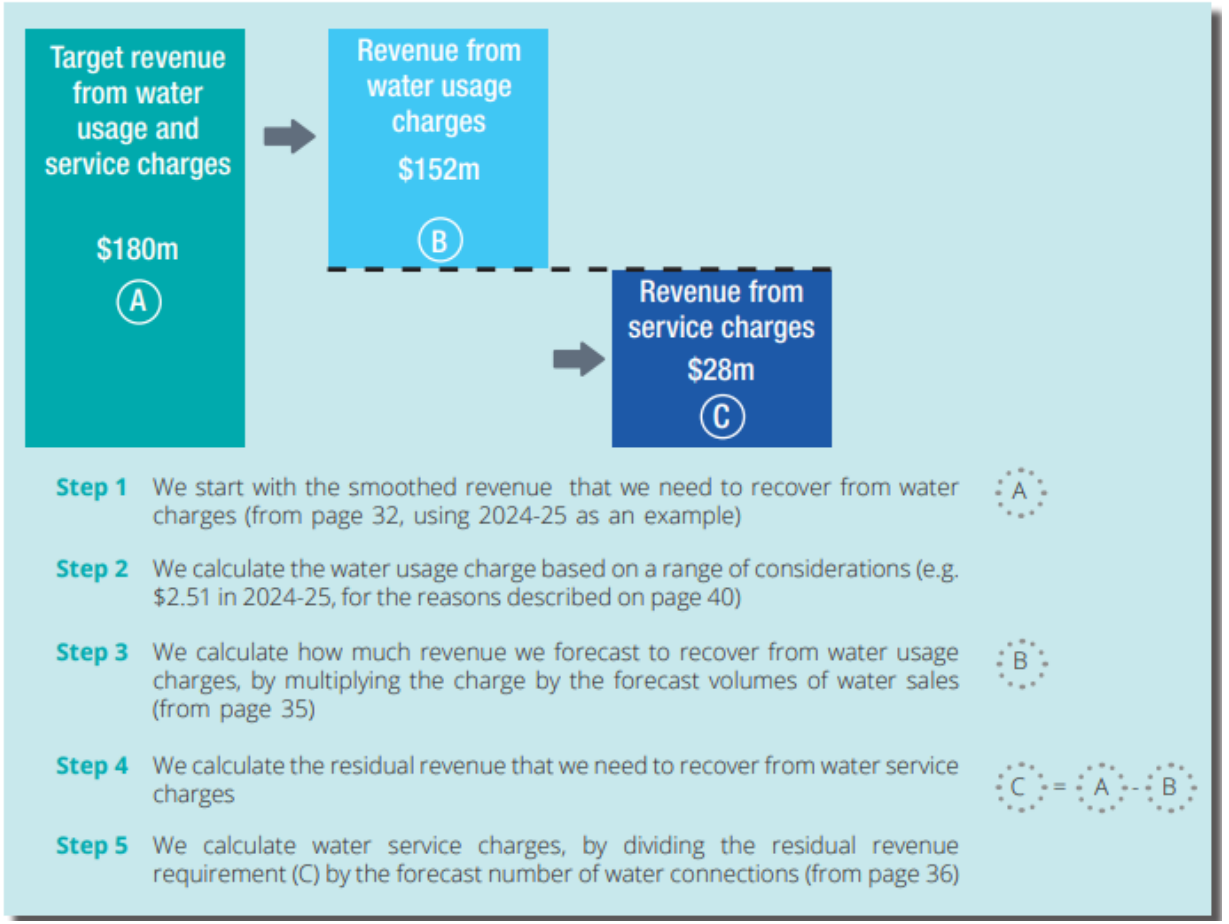
Question	Response
	their own bill rather than for social reasons, like the impacts on low-income households or providing the right incentives for saving water. Consistent with these motivations, customers with lower usage tended to prefer a higher usage charge. Renters preferred a lower usage charge, which is consistent with the fact that many renters pay only the usage component of the bill.
Drought pricing – how are we notified? How long is it in force (i.e., full year or only during declared drought)?	The drought water usage price only applies when Hunter Water storages fall below 60% during drought. The drought price will start 31 days after water storage levels fall below 60% (the 'on' trigger), and remain in place until 31 days after water storage levels rise above 70% (the 'off' trigger). After the off trigger, it goes back to the non-drought water usage price. Part of the reason for the 31 day delay is so that it doesn't "bounce around" between being on and off. The higher price paid for water use during a drought is based on the additional costs that we have to pay during drought – including the costs of accessing and treating high cost sources of water, and of promoting water conservation. This amount does not become an extra profit. The higher price also signals to customers that water is scarce and encourages them to save water at a time when it's more valuable.
How do customers demonstrate low impact on stormwater? Especially apartments.	The Low Impact Stormwater Charge is for customers who go above and beyond to manage the stormwater on their property to ensure any runoff has a low impact on our stormwater infrastructure. To determine whether a property is deemed as low impact on the stormwater system, we assess both the building on the property and the surrounding land. Essentially, you need to demonstrate that you capture and reuse a majority of the stormwater that lands on the hard surfaces of your property. For example, a rainwater tank that collects all your roof water that is connected to your toilets, washing machine and outdoor watering system. Customers who live in a strata unit are already charged at the discounted rate. You can read more about the requirements and application process for the low impact stormwater charge here on our website.
'Off-gridders': what happens to their wastewater and service fees?	Properties that are not connected to the wastewater or water system are not charged a service or usage fee.
Are Hunter Water customers charged for maintaining wastewater infrastructure, if other regions also rely on / use pipes?	Hunter Water provides water and wastewater (sewer) services to MidCoast Water, which then services North Karuah Village on the eastern banks of the Karuah River north of the Karuah Township. End-use customers are billed by MidCoast Water at prices set by MidCoast Water. MidCoast Water owns, operates and manages all of the infrastructure between the handover point with Hunter Water and the customers' properties.

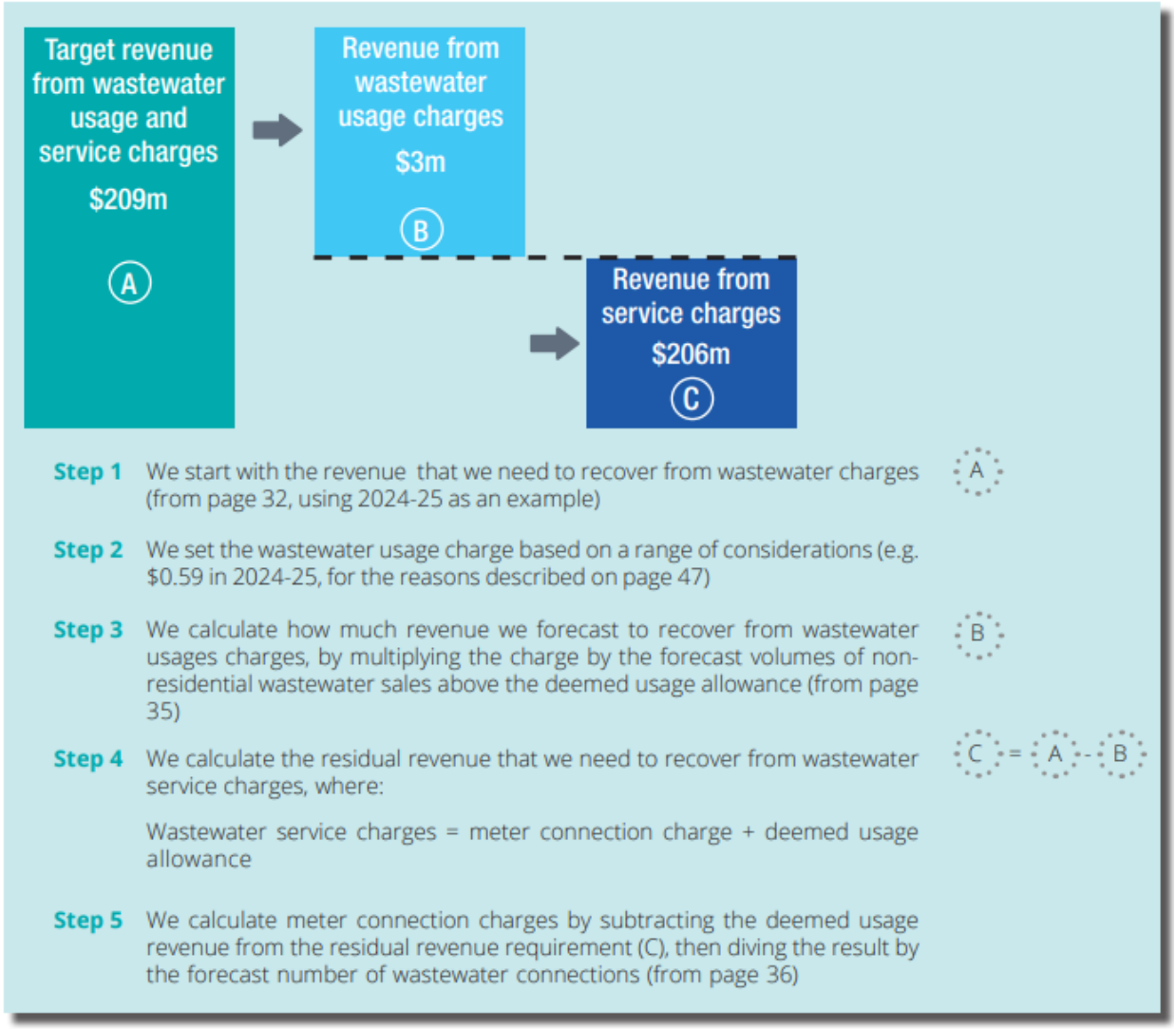
Question	Response
	MidCoast Water pays Hunter Water the same prices as other customers (as set by IPART). They therefore do contribute to the costs of maintaining Hunter Water's wastewater infrastructure. We also have an existing water-sharing agreement with the Central Coast Council. This connects the two regions via a pipeline, offering mutual benefits to both regions concerning water security as well as operational benefits by reducing the impact of localised water outages.
What is the current “price path” for 2025-2030? [this was asked multiple times]	The price path refers to the time that the IPART approved prices are in effect. We are currently engaging with our customers to inform our pricing proposal to IPART for the 5 year period (price path) of 2025-2030. New pricing will come into effect on 1 July 2025 and end on 30 June 2030. Our deliberation with the Community Panel is helping inform our pricing proposal along with other inputs such as the costs of meeting our regulatory requirements. The final prices that will come into effect for the period will be set by IPART.
Need more information/clarification on pricing - To clarify, yes, this is in relation to the building blocks. Specifically, I would like to see how the blocks forming the submission (assume there are several, Opex/Capex, etc), are broken down and translated into what we see within the billing categories on our bills in relation to the fixed costs (i.e. sewer charges) and usage costs (water consumption charges).	There’s quite a good explanation of the building block model in Appendix B of IPART’s Final Report, June 2020, Review of prices for Hunter Water Corporation from 1 July 2020 (see figure B.1 below and on IPART’s website here). IPART does one of these building block models for each of our three services: water, wastewater (sewer) and stormwater (drainage). This is described on pages 63 and 64 of IPART’s report. Corporate costs – that apply across all services – are allocated between the three services.
Need more details about the block submission IPART and how this is factored within individual bills - it might also be useful to understand what are those blocks that are submitted to IPART (details of the submission). What they totalled in the previous submission to IPART, and what Hunter Water is proposing to fill in on those categories for this upcoming submission	

Question	Response
	Figure B.1 Building block approach to calculating the NRR  **Note:** The building block components of NRR in the figure above are not to scale and are for illustrative purposes only. IPART calculated the total notional revenue requirement (NRR) for Hunter Water over the 4 years from 2020-21 to 2023-24 to be $1,370.1 million (in $2019-20 i.e. excluding inflation). That's an average of $343 million per year. The blocks in the total NRR have the following sizes:

Question	Response
	Notional Revenue Requirements $2019-20m The total NRR spread out across the three services as follows:  • Wastewater - $704.8 million over 4 years, average of $176 million per year • Water - $607.6 million over 4 years, average of $152 million per year • Stormwater - $23.1 million over 4 years, average of $6 million per year (you'll recall we only have responsibility for some stormwater services and only in three of the six local government areas that we service)

Question	Response
	IPART's decisions resulted in a lower NRR than we proposed. One of the reasons for that is because the WACC (like an interest rate), used to calculate the size of the return on assets block, changed between when we submitted our pricing proposal and when IPART made its decisions. The WACC is partly based on market conditions around March – May of the year IPART makes its decisions. IPART also cut some of the operating expenditure that we proposed. **Figure 6.2 NRR compared to Hunter Water's proposal, by service ($million, $2019-20)**  **Data source:** Hunter Water, *Pricing Proposal to IPART, Technical Paper 6*, pp 10-11; IPART analysis. In simple terms, IPART divides the revenue requirements by connection numbers and demand (water sales forecast) numbers to calculate prices. We describe the process in more detail on pages 39 and 43 off our 2019 Pricing Proposal (available on IPART's website via the same link as above, or our website). In summary, we use a building block model to build up our notional revenue requirement. We then pull the blocks apart in a different way to get individual prices. Further details are available in IPART's Final Report, June 2020, Review of prices for Hunter Water Corporation from 1 July 2020. How we arrived at our proposed water prices:

Question	Response
	 How we arrived at our proposed wastewater prices:

Question	Response
	

Topic: General / Other

Question	Response
How many quinquennial reviews have you or hunter water undertaken? Is this the first or 10th price reset?	IPART has been conducting reviews since 1992. This will be the 12th price reset. Price reviews (resets) haven't always occurred 5 yearly. They have varied in frequency between one year and five years. The reviews have also become much more detailed over time. During the last few reviews, IPART sought Hunter Water and stakeholder feedback on the appropriate timeframe over which to set prices. As an example, here is the relevant section from their 2019 Issues Paper (pages 110 and 111). All of the Issues Papers, public submissions, IPART decisions and reasons are available to view in full on IPART's website. IPART reviewed it's approach to price regulation of the water industry between 2020 and 2022. In IPART's Final report, our water regulatory framework, November 2022, they decided on 5-yearly price resets to promote better long-term planning
Why is this the first time you have done a community panel like this? You have to submit the report every 5 years, so why the lag in community panel?	Our response to a previous question explains that price reviews (resets) haven't always happened every 5 years and why that was the case. In 2020, IPART started a major review of how they regulate water businesses. That is, IPART reviewed *how* it does price resets. IPART took a consultative approach to the review, including two scoping papers, three discussion papers, workshops and a draft report. Many stakeholders and customer advocates participated, not just water businesses. This review resulted in IPART's new regulatory framework, which focuses on customers, costs, and credibility – referred to as the '3Cs' model. As mentioned by Darren Cleary (Hunter Water's Managing Director) at the orientation session, prior to the 3Cs model we considered that IPART's approach focussed on making costs and prices as low as possible and didn't provide much room for us to understand our customers' and community's preferences and reflect that in the services we provide. It felt like IPART focussed on what we *had* to do (mandatory obligations) rather than what customers thought would add value. We made some small steps forward in our 2019 pricing proposal when we proposed some expenditure to make recycled water available for greening parks and sporting fields, and made some of our stormwater drains look better. Since the 3Cs model was introduced, we feel like we have more room to work closely with customers and the community to shape our services and price levels. We have watched energy businesses and interstate water businesses run community panels, where we saw them learn together and genuinely

Question	Response
	influence outcomes for the good of the whole community. We feel like it's the right process for us now and we feel like we can genuinely promise to "collaborate" because IPART's new 3Cs model won't just dismiss what we've done (how we've responded to what we've heard).
Has Hunter Water ever been non-compliant?	The standards that Hunter Water must meet are set out in our Operating Licence. Every year, we publish our Compliance and Performance Report (link) that summarises our performance in meeting specific compliance standards. This is regulated by IPART. Our key performance standards generally relate to the amount of adverse service delivery events our customers experience (for example, low water pressure or wastewater overflows) and water quality standards (which are strictly set out in the Australian Drinking Water Guidelines). Not all non-compliances are equal. Some can be administrative in nature - for example, we may inadvertently publish a report after its deadline, or we may not record specific information in the specified format. In these circumstances, customers are generally not impacted and the non-compliances are considered minor in nature. Other non-compliances can be more significant and potentially have material consequences on our customers. We call these 'major' non-compliances. While we consider ourselves to be a high performing and compliant organisation, there have been times when we have had both major and minor non-compliances in the past. When we are non-compliant, we are required to tell IPART, who can undertake enforcement action. These non-compliances are publicly available as part of IPART's report to the Minster on Hunter Water's compliance. The 2021-22 report is available here. You can also view IPART's policy on compliance and enforcement on their website here.
Why are we restricted to the 3 topics only?	While the Community Panel is only considering 3 topics, you could also think of it as 7 or 8 topics. Hot Spots has 3 sub-topics (low water pressure, wastewater overflows and wastewater odours). Water Conservation has 4 sub-topics (water efficiency for customers, Hunter Water's leakage and two end uses for recycled water). There are a couple of reasons why we can't include everything: 1. It takes a lot of time - from you and from us - to think deeply about each topic, learning from the background, exploring potential solutions and coming up with recommendations. As you can see from the schedule, we're planning to spend about a day on each topic, as well as a day arriving at a consensus. Insync has told us that 5 days is about right for this type of deliberation otherwise lots of the Community Panel members will drop out.

Question	Response
	2. We only wanted to include topics where we can promise the Community Panel a high level of participation in the decision. There are lots of things we'll need to do between 2025 and 2030 because we have to. We don't have a choice. 3. We only wanted to include topics that matter to our customers and the community. We spent time in our first two stages of customer engagement finding this out.
Is there a region with a comparable size and structure water company (like Sydney Water or someone else) and we can access their pricing proposals?	The most similar sized water businesses are Barwon Water in Victoria and Gold Coast City Council's water and wastewater services in Queensland. However, these water businesses are subject to some different laws and regulations because they are based interstate (e.g. different laws and requirements for environmental protection). Their pricing frameworks are also different. Also, Gold Coast City Council doesn't own or operate dams. It buys bulk water from Seqwater, who own Hinze Dam and a desalination plant. In NSW, we are most often compared with Sydney Water. They are due to submit a pricing proposal at the same time as us (September 2024). Their last pricing proposal was in 2019. It is available on IPART's website. We are also sometimes compared with Central Coast Council's water and wastewater services, even though they're set up a bit differently from us. Their last pricing proposal was in 2021 and is also available on IPART's website. Barwon Water has just finished their price review with Victoria's price regulator - the Essential Services Commission (ESC). Their 2022 pricing proposal is available on the ESC's website (see "resources" tab).
Has Hunter Water looked at other water board practices to identify good practices and considered implementation?	Hunter Water is a member of the Water Services Association of Australia (WSAA). WSAA is a non-profit organisation that aims to enable the exchange of information between industry, government and the community, and to promote sustainable water resource management. WSAA collaborates with Australian utilities on a broad range of topics, including leakage management, risk management, water security and asset management. WSAA organises cost efficiency benchmarking between member organisations and helps employees from different organisations to link up to discuss their approaches to different challenges, including good practice and how they've become more efficient (by providing a better service at the same cost, or the same service at a lower cost).
How does Hunter Water compare? How does Hunter Water rate against its peers (here and overseas)?	We compare our performance against all other water service providers in Australia. We participate in the Bureau of Meteorology's National Performance Report (NPR). The NPR compares our

Question	Response
	performance against over 80 other service providers, across more than 160 indicators. These indicators cover areas including environmental, financial and asset management. You can read the 2021-22 report on the BoM's website here. The 2022-23 report is expected to be released around April next year.
What benchmarks does HW have?	We use a variety of benchmarks to ensure we are performing at industry standards across the organisation. Some of the benchmarks we use to analyse our performance include: - The National Performance Report, an annual comparative performance report published by the Bureau of Meteorology - A variety of Water Services Association of Australia (WSAA) benchmarks to measure performance in areas such as water efficiency, energy efficiency and operating costs - Customer experience benchmarks that measure our performance in providing timely and effective customer services
Can we have a copy of the annual report?	Our 2022 Annual Report (1 July 2021 - 30 June 2022) is available on our website here. The 2023 Annual Report will be published on our website soon.
I'd like to see how international water providers address the issues we are facing; drought cost recovery, hotspots and water security.	It can be quite difficult to compare specific issues on an international scale due to a range of reasons, including: - different laws, standards and regulation - varying climates, that have an impact on water scarcity and supply - priorities and expectations of customers and communities in different geographic locations
Regulated vs unregulated prices – a dull till? Are any discussions on unregulated prices on the table? Is this why big business is not included?	The Community Panel's scope involves a particular type of regulated prices. These are sometimes known as retail prices or prices for retail services. The types of things that are covered by regulated prices vs unregulated prices are set out in laws and therefore we cannot change what falls into each category. IPART has a standing order to decide on prices, or decide on a methodology to set prices, for legislated monopoly services. Hunter Water monopoly services are those contained in the Independent Pricing and Regulatory Tribunal (Water, Sewerage and Drainage Services) Order 1997 published in New South Wales, Government Gazette, No. 18, 14 February 1997, p. 558. These are: • Water supply services - generally in scope of the Community Panel • Sewerage services - generally in scope of the Community Panel

Question	Response
	• Stormwater drainage services - generally in scope of the Community Panel • Trade Waste Services - not in scope of the Community Panel • Miscellaneous Services - not in scope of the Community Panel. These are typically discrete, one-off activities that are only utilised by a small number of customers. • Services for new developments - not in scope of the Community Panel. These are subject to a separate price review and IPART decision. For water supply services and sewerage services, IPART currently allows us to enter into unregulated pricing agreements (UPAs) with large non-residential customers, provided the costs and revenues of these unregulated agreements were ring-fenced from the regulated cost base. Large users are defined as non-residential (business) customers with annual water use of more than 7,300kL per year (as compared with typical household water use of around 181kL per year). That water use amount can be across multiple properties. UPAs are intended to help Hunter Water and large users agree to innovative win-win solutions to their needs. Importantly, we cannot give a discount to large users by getting the extra money from households or other customers. Regarding the question "Is this why big business is not included?", our target was to have 2 business water users on the Community Panel based on demographics in our region (see the question *"What was the decision-making around only including two commercial operators?"* for more detail). We did not set a size limit on this target. We have involved big business in some of the customer and community engagement for the price review. Typically, we have good contacts within large businesses and understand their needs quite well. We have less contact with small to medium businesses and are seeking to understand their needs and preferences better. These types of customers have quite different needs and preferences. e.g. A cafe or hairdresser may find that an interruption to their water supply will stop them from working completely whereas a large business might have a storage tank or back up supply.
What is the budget for this panel in $ or %?	The costs for undertaking the deliberative stage of this engagement are commercial in confidence. We undertook a competitive tender process to engage our consultants. If these costs were to be made public, it would undermine our ability to achieve value for money in any future similar tender processes. However, these costs represent a tiny proportion of our current operating budget.
What is the lifetime of a treatment plant? When are the current plants due to be refurbished/rebuilt?	We have a few types of treatment plants in our network, but the two key ones are: - wastewater treatment plants (WWTPs) that treat wastewater before it is released into the environment

Question	Response
	- water treatment plants (WTPs) that treat water to a potable state for distribution WWTPs and WTPs are usually made up of a combination of smaller assets, each with its own "lifetime", such as: - Civil e.g. pipes, drains, concrete structures – these last for around 100 years - Electrical/mechanical e.g. cabling and switchboards – these last for around 30 years - Equipment e.g. telemetry, SCADA (supervisory control and data acquisition – which basically helps use change settings remotely) – these last around 20 years We usually don't replace a whole WTP or WWTP at once. We only replace or fix the bits that are worn out, or not working properly.

Topic: Parking lot

Question	Response
[Fact check request] That the mix of fixed charged for sewage and per litre usage charges in billing is off the table / unchangeable by us. Who and how did you come up with the base rate? Everyone in my community that I have spoken to, regards this as an important issue and the cost is too high compared to per litre usage.	See responses to the questions 1. *"Do you have flexibility in the structure of prices (metered usage, wastewater vs supply, etc) or does IPART dictate this?"* *2. "What are they survey results for variable / fixed prices used to bill customers? Referring to page 21 of the Engagement Report which says "We have previously surveyed customers about…"?"*
[Question from Facebook] I'm concerned that probably the most important issue of all, and the one that could make the biggest difference to people's bills, is considered "out of bounds". That is, the mix of fixed and variable charges. It seems to me that most of us have very large fixed charges, and that there is actually very little incentive for households to reduce their actual water usage. Conversely, large water users are getting a free ride on the back of the exorbitant fixed charges levied on households. The reasons given for this being out of scope seem very weak - that this has been dealt with in previous community consultation. I thought that's what this Panel is all about.	Our residential water service charge is currently $29.51 per annum. That's about 6% of the total cost of an annual water bill (excluding wastewater and stormwater). Therefore, variable costs make up around 94% of a typical water bill. Business (non-residential) customers pay a higher fixed water service charge each year. All residential customers (owners of apartments and houses) are 'deemed' to have a single 20mm meter connection. Non-residential water customers pay the service charge based on actual meter size in relation to the 20mm base. - A business customer with a 100mm water meter has a water service charge of $689.59 this year - A business customer with a 300mm water meter has a water service charge of $6,205.50 this year. Our wastewater charges are set at a fixed rate for residential customers ($789) per annum – this is because our customers previously told us that they preferred this price structure. You can read more about this in the response to the question: '*What are they survey results for variable / fixed prices used to bill customers? Referring to page 21 of the Engagement Report which says "We have previously surveyed customers about…'.* You can also read more about how variable and fixed price structures are set in the response to the question: '*Do you have flexibility in the structure of prices (metered usage, wastewater vs supply, etc) or does IPART dictate this?'.*
Hydrogen production uses water and electricity with plants for Kooragang. (why is it out of scope)	There is significant uncertainty regarding the proposed hydrogen hub, including if and when it will proceed. A Water Servicing Plan is being developed to investigate how a hydrogen hub would be serviced should it proceed. The Servicing Plan will investigate using alternative sources of water such

Question	Response
	as recycled water from our wastewater treatment plants. It will complement the Lower Hunter Water Security Plan to ensure we have enough water for the future and during drought.
There are smart meters in irrigation. Alerts by apps or techie to fix. (why is it out of scope)	We did include digital metres in stages 1 and 2 of our engagement program, based on customers raising it as a topic of interest to them. The outcomes of that work indicated that customers were supportive of us conducting a small trial between 2023 and 2025 followed by a bigger trial for example in areas where Hunter Water can't get access to read mechanical metres. The outcomes of the small trial will inform any bigger trial we may conduct in the future.
Incentives to pay bills on time. (why is it out of scope)	Price structures are out of scope for the reasons described in response to another question (*see the question "Do you have flexibility in the structure of prices (metered usage, wastewater vs supply, etc) or does IPART dictate this?*). That is, it is challenging to balance the three considerations of cost reflectivity, customer preferences and customer impact. As with any changes to price structures, there would be winners and losers from having financial incentives to pay bills on time. Incentives (discounts) for on-time payment are similar in some ways to late fees for paying bills late. Sydney Water has a late payment fee but Hunter Water does not. Customer advocates (such as the Public Interest Advocacy Centre) have questioned the need for these fees, noting that late payments can be a result of socioeconomic disadvantage (can't pay, rather than won't pay). Similarly, we are concerned that customers experiencing financial hardship will never be eligible for an on-time payment discount.

Hunter Water Community Panel

Day 1 Fact Check Requests

Topic: Carbon reduction

Fact check request	Response
Planting trees having the highest impact on bills (page 64 of Engagement Report)	In our priorities survey, we ranked the options for reducing carbon emissions from most expensive to least expensive. This did involve some generalisation. The option of investing in planting trees assumed that we would do this ourselves on non-operational land in a manner that creates accredited Australian Carbon Credit Units (ACCUs) issued by the Australian Clean Energy Regulator, or by purchasing ACCUs from the market (from someone else's tree planting). To get ACCUs, there are certain checks and balances to make sure the carbon reduction is actually occurring. There's more to do than just planting the trees e.g. regular audits. If the plantings are done in a certain way, they may have additional environmental benefits. Environmental planting projects represent a more valuable type of carbon removal for long-term storage and tend to have other benefits related to threatened species and positive impacts on water and soil health. These ACCUs are worth more (i.e. cost more to create or buy). The purchase of renewable energy, such as solar or wind, involves a different type of accredited certificate called an LGC (large-scale generation certificate). There are uncertainties regarding the costs for both options. It could make more financial sense to offset emissions through LGCs, but there is lots of uncertainty in relation to the price of ACCUs towards the end of the decade. The is relatively more certainty on the cost of planting trees. Based on a mind-point long run assumption on the costs of ACCUs, the cost of planting trees could be a competitive way of reducing our emissions financially per tonnes of carbon abated (it might be a bit less, about the same or a bit more, but should not be significantly more or less based on the assumptions we've made).

Topic: Water conservation

Fact check request	Response
Price per KL for desalinated water vs wastewater vs stormwater	The Water Services Association of Australia (WSAA) is a non-profit organisation that aims to enable the exchange of information between industry, government and the community, and to promote sustainable water resource management. WSAA has published a report titled 'All Options on the Table' (this report analyses and compares urban water supply options in Australia, including desalinated water). The levelised cost per kilolitre (the cost required to build a plant and supply the water) ranges from $2.00 to $6.00. The same report also provides an analysis of the cost of supplying recycled water for both drinking and non-drinking purposes. It also analyses the costs of recycling stormwater for non-drinking purposes (stormwater harvesting). The cost of providing recycled wastewater for non-drinking purposes ranges from $0.40-$15.00 per kilolitre, with a median cost of $4.35 per kilolitre. The cost of providing recycled wastewater for drinking purposes, commonly referred to as 'purified recycled water' ranges from $0.90-$6.90 per kilolitre, with a median cost of $2.34 per kilolitre. The cost of providing recycled stormwater for non-drinking purposes varies significantly based on the size of the recycling scheme. It ranges from $0.60-$33.00 per kilolitre, with smaller schemes usually costing more per kilolitre. The median cost is generally lower than $5.00 per kilolitre.
Does state government fund new industries i.e. desalination plants?	Hunter Water operates under IPART's regulatory funding framework. This framework involves the recovery of all prudent and efficient costs through regulated prices charged to customers over time. In terms of water services, regulated prices include: - Periodic prices (sometimes called retail prices) are charged to connected customers via regular bills throughout the year. - Developer charges. Developer charges are location-specific, upfront charges that will help to recover the costs of providing or upgrading infrastructure for new developments in our area of operations. IPART has set a methodology that we must use to calculate developer charges. The NSW Government previously set these charges to zero. However, following recommendations set out by the NSW Productivity Commission, developer charges are being reintroduced. Further detail about developer charges and their gradual reintroduction is available on our website. In general, the State Government does not fund the costs of Hunter Water providing or upgrading infrastructure for new

	developments in our area of operations. There are occasional exceptions. As an example, we have previously received state government funds for projects under round two of the Housing Acceleration Fund. The Housing Acceleration Fund was a NSW Government program to drive housing growth through co-funding of infrastructure projects such as water, wastewater, roads and electricity. The projects funded were the Farley regional wastewater network, Lochinvar wastewater network upgrades and the Lochinvar water mains project.
~12% of water is recycled, increase of 8% over the last five years. More than Sydney but less than some regional areas (i.e. because they use more for agriculture).	Yes, around 12% of water is recycled. The percentage does vary year on year, as demand for recycled water is dependent on weather conditions. In 2021-22, 8.2% of our water was recycled. Over the period between 2017-2022, the percentage ranged from 7.7% to 13.6%. You can see this data for yourself via the Bureau of Meteorology's National Performance Report here. To clarify, the percentage of water that we recycle has not increased by 8% over the last five years. Rather, it has increased from an average of 8% to 12%. Our water recycling percentages are higher than Sydney Water's. In 2021-22, Sydney Water recycled 5.6% of their water. Over the period from 2017-2022, the percentage ranged from 5.6% to 8.7%. As a general rule of thumb, the percentage of water that is recycled is higher in regional areas. This tends to be for a variety of reasons, including higher demand for agricultural purposes and scarcity of other sources of water supply (for example dams or rivers).

Topic: Prices and charges

Fact check request	Response
Is the maintenance of the desalination plant adding into the costs of bills? Why can't this facility be better utilised towards water security?	The capital and operating costs of the Belmont desalination plant would form part of the revenue requirement used to determine prices for Hunter Water customers. Once constructed and operational, the desalination plant will be used to supply a small, continuous amount of water when storage levels are high, increasing to full supply capacity during times of drought. The reason for this is it's cheaper to supply water from our dams and sandbeds - we'll only use the desalination plant when it makes sense, like during a drought when we are suffering from water scarcity. Residential customers currently pay a variable usage charge of $2.89 per 1,000 litres of water. During times of drought, the variable usage charge 'uplifts' to $3.39 per 1,000 litres. The drought usage price seeks to reward people for saving water when it matters most and to reflect the extra costs associated with drought related activities. During a drought when we run the desalination plant at full capacity, the increased operating cost of doing so will be recovered through a higher drought usage price per 1,000 litres of water. The desalination plant is a key component of the Lower Hunter Water Security Plan (LHWSP). Whilst it is a critical aspect of addressing our water security challenge, it cannot solve the challenge alone. Making the most of the water supply sources we already have (by conserving water and fixing leaks in our system) is also necessary to address the challenge.
Returned money from the State Government - Community service obligation funds (CSO)? - How are CSO funds used? - How are CSO funds tracked? - Who is eligible for CSO funded programs and initiatives?	A CSO is an activity that would not be pursued by a commercial government business (like Hunter Water) when acting on a purely commercial basis. CSO provide a payment to government businesses to perform a certain activity that aligns with government policy objectives. You can read more about the CSO framework here. To access CSO funds, we make a claim to the Department of Planning and Environment (DPE) and are reimbursed. In the year ended June 2022, Hunter Water claimed $17.25 million in CSOs. You can read more on page 97 of our 2022 Annual Report here. Our 2023 Annual Report will be published on our website soon. The CSO funds that Hunter Water claim are used to fund rebates given to pensioners, customers experiencing vulnerability through our Payment Assistance Scheme and to exempt properties (for example churches). Around 17% of our customers are eligible for and receive pensioner rebates. You can read more about the eligibility criteria here.

Fact check request	Response
- What are Hunter Water's current applications of CSO funds?	We also provide a rebate to certain customers who meet exempt property status, such as nursing homes, and religious, charitable or public benevolent organisations. We currently have around 1900 exempt properties. These rebates are based on eligibility in accordance with government guidelines. For example, nursing homes guidelines are: - Must be able to provide evidence they are a registered charity and have tax exemption status from the ATO - Commercially owned properties are not eligible - The allowance is granted where it can be demonstrated the usage is for the direct benefit of eligible residents - Eligible residents are those that are in 'high care' facilities (i.e. self-care are not included in bed count) - Staff residents, regardless of their state or ordination, are not included in the 'count'
What is your WAAC (weighted cost of capital)?	The WACC is the weighted average cost of capital. The WACC estimate is used to calculate the return on our regulatory asset base. That is, it helps determine the size of one of the building blocks of our revenue requirement that relates to capital expenditure (e.g. constructing infrastructure). It is IPART's measure of the cost of financing Hunter Water's regulated business activities. It's called a weighted average because it reflects the combination of debt and equity used to build assets. Simplistically, it's a bit like building a house based on, say 40% savings (equity) and 60% mortgage (debt). The debt component reflects the interest rate that we are charged on our borrowings to invest in infrastructure. IPART's WACC methodology considers the efficient cost of debt and equity through time for a benchmark firm. It assumes that an efficient firm uses 40% equity and 60% debt financing. It does not consider the actual proportions of equity and debt that we use. Customers and Hunter Water have very limited influence over this figure. Like a mortgage, the debt part reflects the costs of borrowings, similar to RBA determined interest rates. If you're interested in how the WACC is calculated, you can read more in IPART's review of the WACC method here. As part of our pricing determination (in other words, IPART's final decision on our proposal) IPART set a WACC determination to apply for the pricing period. We submitted our last pricing proposal in July of 2019 and IPART provided their final determination nearly a year later in June of 2020. In the June 2020 Final Report, IPART determined our WACC would be 3.4% for the current pricing period. IPART will set the final WACC used to determine prices for the 2025-2030 period in May 2025. We are expecting the WACC used to set 2025-2030 prices will be higher than the WACC used to set current prices, because some of the input parameters have gone up.
Survey results for variable and fixed prices	Please see the response to the question: "*What are they survey results for variable / fixed prices used to bill customers? Referring to page 21 of the Engagement Report which says "We have previously surveyed customers about…"*

Fact check request	Response
Business and industry pay the same $ per KL as residential customers since the last pricing change	Both residential and non-residential customers pay the same usage charge per kilolitre of water, for the first 50,000 kilolitres of water used:

RESIDENTIAL HOUSE

CHARGE TYPE	ANNUAL CHARGE	PRO-RATA PER BILL*	EXPLANATION
WATER SERVICE	$29.51	$9.84	Applies to all residential houses. Includes Environmental Projects Charge
WATER USAGE NON-DROUGHT	$2.89	Per kilolitre registered	e.g. 50 kL x $2.89 = $144.50
WATER USAGE - DROUGHT RESPONSE DAYS	$3.39	Per kilolitre registered	*The drought price will start 31 days after water storage levels fall below **60%** (the "on" trigger), remain in place until 31 days after water storage levels rise above **70%** (the "off" trigger).
SEWER SERVICE	$789.18	$263.06	Applies to all residential houses.
STORMWATER SERVICE	$97.04	$32.35	For the maintenance of some of the larger stormwater channels in Newcastle, Lake Macquarie and Cessnock. Only applies to properties from which stormwater flows to catchments that use these channels.

*will vary slightly with actual days the account covers (ie. 123, 120, 122 days per billing cycle)

Fact check request	Response
	NON-RESIDENTIAL PROPERTY CHARGE TYPE / ANNUAL CHARGE / PRO-RATA PER BILL* / EXPLANATION WATER SERVICE – BASE – $27.58 – $9.19 – Applies to properties with a single 20mm water meter only. METER SIZE – $27.58 – $9.19 – Applies to 20mm meter size where there are multiple meters. For other meter sizes visit hunterwater.com.au. WATER USAGE - NON DROUGHT DAYS – $2.89 – Per kilolitre registered – e.g. 50 kL x $2.89 = $144.50 Charge may alter after the first 50,000kL, visit hunterwater.com.au. WATER USAGE - DROUGHT RESPONSE DAYS – $3.39 – Per kilolitre registered – *The drought price will start 31 days after water storage levels fall below **60%** (the "on" trigger), remain in place until 31 days after water storage levels rise above **70%** (the "off" trigger). For every kilolitre of usage over 50,000 kL, some non-residential customers pay a different usage charge per kL. We call these zone based charges:

For zone based charges the usage price varies according to where each property is located within our area of operations and is greater than 50,000kl consumption in a year.

WATER USAGE	USAGE CHARGE (PER KL OF WATER USED)
0-50,000kl	$2.89
Unfiltered Water	$0.43
Dungog	$2.75
Kurri Kurri	$2.88
Lookout	$2.84
Newcastle	$2.82
Seaham - Hexham	$2.76
South Wallsend	$2.86
Tomago - Kooragang	$2.75
All other locations	$2.89

Fact check request	Response
	Zone based charges will be phased out in 2024-25. They will not be in place during the next pricing period. You can view a list of our charges, including fixed service costs, on our website here.

Topic: General / Other

Fact check request	Response
Water usage makeup is 30% business, 60% residential and 10% loss	Every year, we publish a Water Conservation Report that details our annual water conservation performance. On page 9 of the 2022-23 report, we detail the volumes of water supplied and sourced during 2022-23. In Table 2.2, we outline the relative proportion of water supplied to: - Residential customers (58%) - Non-residential customers (24%) - Other service providers in our area of operations (2%) - Other service providers outside our area of operations (1%) - Non-revenue water (15%) When we say non-revenue water, we're talking about water lost in our system before it reaches customers. This can occur due to leaks, but also due to other factors such as theft.

Hunter Water – Day 2 questions

Topic: Base bill increase

Question	Response
The $0-$6 on $1,340 bill (pg 7 of presentation slides handout) is less than 0.005% - that's a low number to influence. Could we have played a larger role?	It's a maximum of $6 each year, every year. That means that in year 5 (2029-30) it could be anywhere between $0 or $30. This impact on a typical household is based on expenditure of up to $90 million across 2025-2030. This estimate ignores the effects of which year the money is spent and would vary based on the mix of operating costs and capital costs. Recall that operating costs are recovered immediately (in the year spent) but capital costs are recovered over time. The upper estimate of $6 per year, each year is still an estimate. It is not an upper limit. That is, the Community Panel may recommend investment on the three topics in scope that results in an impact of more than $6 per year, every year for a typical household annually. The Community Panel would need to form the view that this investment is in the best long-term interests of customers and the community, given other factors including the estimated base increase in bills totalling $56 per year, every year. We have tried to put as much on the table as possible for your recommendation, based on topics of interest to the community and where there is a material decision where you can have a high level of influence on better service. Equally important to the Community Panel recommendation on **how much** Hunter Water invests on each issue is the recommendation on **how** that investment is used. E.g. how we use that money and what outcomes it achieves. This will help us to understand your recommendations and remain true to their intent during the price period (2025-30). The increases cover and would continue to cover the things that were mentioned in the slideshow presented at our session on 3 Feb 2024. The new bill that you have in 2030 becomes the 'new normal' for those things. This mean that your recommendations will have an impact for many years to come.
$0-$6 is that what this is all about?	
Given $6 ($300m) to spend, how would HW allocate between Hot Spots, Carbon Reduction and Water Conservation to give the end user (customer) the best value for money (reduce future cost increases)?	This is something we are asking the panel to help us with. We want to hear from you, not only about how **much** you think we should invest on these issues, but **how** we should spend it. We want to understand the principles you base your recommendations on to allocate according to what the Panel values, in the best interests of the community.
Page 3 of Darren's presentation noted 15 utilities… is that the total number of water 💧 utilities in the country, or were just 15 selected?	The data was from the National Performance Report – an annual independent performance analysis of Australian urban water utilities published by the Bureau of Meteorology (see http://www.bom.gov.au/water/npr/). The analysis covers 86 water service providers across Australia,

Question	Response
	however, most of the comparisons are made in smaller groups based on the number of customers serviced by the water utility. The utility groups used by the Bureau of Meteorology are: • Major – 100,000+ connected properties • Large – 50,000 to 100,000 connected properties • Medium – 20,000 to 50,000 connected properties • Small – 10,000 to 20,000 connected properties. There are 15 water utilities in the **'major'** group, including Hunter Water. While Darren's graph only showed results for these 15 utilities, Hunter Water's water and wastewater operating costs per property were actually the lowest out of all the 68 water utilities reporting data for that indicator in 2022-23.
Has Hunter Water thought to merge with other water utilities to create operational efficiencies?	Our area of operations is set by the NSW Government, in accordance with the Hunter Water Act 1991 (s16(1)). We are prohibited from expanding into other areas unless we have consulted with the relevant council, public authority or water supply authority about the expansion and its implications. Our business structure is also set in legislation and potential changes to it are a matter for the NSW Government. The business structure for some other NSW water utilities, with whom Hunter Water could potentially merge, is also set in legislation. Whilst there is potential for efficiencies associated with some changes in water industry structure, there are also potential risks and shortcomings.
How do you plan to grow beyond the current limits to ensure both affordable and consistent water supply?	If the question is primarily about how we are planning to meet the water security needs of the lower Hunter as our region grows, these actions are set out in The Lower Hunter Water Security Plan https://www.hunterwater.com.au/documents/assets/src/uploads/documents/Plans--Strategies/lower-hunter-water-security-plan.pdf If the question is more about how we 'balance providing reliable, high quality services while protecting the environment, creating a positive legacy for future generations and keeping prices affordable', this is the challenge we are asking the community panel to help us face. Please also see the response to the question "Does 1% population growth predictions help to reduce costs and therefore impact price of water?"
Does 1% population growth predictions help to reduce costs and therefore impact price of water?	That's a complicated question. It depends on where the growth occurs and whether we have spare capacity in the system to service the growth. Our total costs increase as we serve more customers. However, the average cost to serve each property can often reduce due to economies of scale. Growth in the number of properties receiving our services and in

Question	Response
	the volumes of water sold can also help reduce bills for all customers because there are more customers to spread the costs over. On the other hand, sometimes population growth means that we need to build new infrastructure – like water sources or additional wastewater treatment capacity. New infrastructure tends to be 'lumpy' – we can only make step changes to capacity e.g. make it big enough to service an extra (say) 10,000 people rather than big enough to service an extra 10 people. In these circumstances, population growth could increase average costs. Developer charges can help reduce the proportion of the costs associated with population growth that are put into customer bills. Developer charges are location-specific, upfront charges that will help to recover the costs of providing or upgrading infrastructure for new developments in our area of operations. IPART has set a methodology that we must use to calculate developer charges. The NSW Government previously set these charges to zero. However, following recommendations set out by the NSW Productivity Commission, developer charges are being reintroduced. Further detail about developer charges and their gradual reintroduction is available on our website.
Is one desalination plant enough for the future?	The LHWSP recommends the proposed Belmont Desalination Plant as the only permanent drinking water desalination plant in the Lower Hunter. Other potential water sources are also being investigated to improve our overall water security, including an option to connect to fresh water supplies in the Upper Hunter via the Paterson River, exploring a potential new groundwater source, as well as new recycling schemes to reduce our overall demand. Another desalination plant is being considered for the Lower Hunter as a potential drought response measure however delivery of this plant would only be triggered in the event of a serious drought. If this trigger is not reached, and other source augmentations can be progressed as planned, the current plan is for only one (permanent) desalination plant for supply of drinking water to the Lower Hunter.
Can the Belmont desalination plant be shared with Central Coast who could share costs?	Belmont Desalination Plant will ensure water security for the Lower Hunter as a priority. Our agreement with the Central Coast to transfer water between our regions is dependent on relative water levels between dams. The pipeline can transfer water in either direction according to established water sharing rules. This offers mutual benefits to both regions for drought security as well as operational benefits by reducing the impact of localised water outages. This agreement doesn't compromise the water security of our region. Belmont Desalination Plant will optimise how we can store water, increasing the overall capacity of the water that's available.

Question	Response
Big business to pay more for water or for Hunter Water advice to increase revenue streams. For them it's a cost of doing business.	Hunter Water adopts 'postage stamp' pricing, which is in line with NSW Government policy. All customers pay the same amount per kilolitre of water supplied, regardless of whether they are a residential household or a large industrial business, or where the customer is located across our region. The intent is to ensure fairness between different customer groups. Business water bills are typically much larger, however, as they use more water than a residential property. Hunter Water has been phasing out a historic discount for some large business customers previously applied based on their location. From 1 July 2025, this historic discount will be fully removed. In addition to having a higher bill due to using more water, businesses also pay a higher fixed water service charge each year. All residential customers (owners of apartments and houses) are 'deemed' to have a single 20mm meter connection. Non-residential water customers pay the service charge based on actual meter size in relation to the 20mm base. - A business customer with a 100mm water meter has a water service charge of $689.59 this year - A business customer with a 300mm water meter has a water service charge of $6,205.50 this year. IPART's best practice pricing principles (2018) state that prices for each service should reflect the efficient cost of delivering them and the cost of servicing each customer type (i.e. no cross-subsidies between water, wastewater and stormwater customers, and no cross-subsidies between residential and non-residential customers). This means there is limited scope for charging large businesses higher rates because of their ability to pay.
Diversions of revenue stream could lead to community funded programs that can help eleviate (sic) price impacts i.e. grants.	Hunter Water operates under IPART's regulatory funding framework. This framework involves the recovery of all prudent and efficient costs through regulated prices charged to customers over time. In general, the State Government does not fund the costs of Hunter Water providing or upgrading infrastructure for new developments in our area of operations. The same situation applies to funding from the Federal Government. There are occasional exceptions, such as: • Community service obligations (CSOs), related to pensioner rebates and exempt property rebates. • Grants for specific projects We continue to explore all opportunities to alleviate customer bills by applying for grants, where we are eligible for funding.

Question	Response
The $30 year on year does this continue to climb after 29/30 when the desal plant should be paid off? (present customers 268440 x $30. Increase $8m/year on bills gives $120m over five years. Plant costs $530m so $410m left)	As Jen Hayes described during the Day 2 session on 3 Feb 2024, the $30 climbs year on year until the end on the price period ($150 by 2030): • $30 in 2025-26 • $60 in 2026-27 • $90 in 2027-28 • $120 in 2028-29 • $150 in 2029-30 That's a total of $450 per typical household over the 5 years. Recall that operating costs are recovered immediately (in the year spent) but capital costs are recovered over time. (See pages 18 to 20 of the Engagement Report for further detail about how operating costs and capital costs are treated in prices and bills). The costs of the desalination plant will continue to be recovered over the life of the asset, well beyond 2030. The desalination plant will be made up of a combination of smaller assets, each with its own "lifetime", ranging from around 20 years to 100 years.
If there was an option to avoid spending half a billion dollars while 'indebt-ing' the community - would you take it?	The Belmont Desalination Plant was a preferred option in the Lower Hunter Water Security Plan that was released by the NSW Government in 2022. It is now subject to further government scrutiny and decision-making, through the process of modified planning and funding approvals. Hunter Water, along with other NSW government stakeholders, consulted extensively with our community in developing the LHWSP. The level of public participation in decision-making was at the 'Consult' and 'Involve' level of the IAP2 Spectrum of public participation (see page 31 of the 2025 Pricing Proposal Community Panel - Engagement Report). We're promising you a higher level of influence on the decision-making process – for the in-scope topics – at 'Collaborate'. Throughout the development of the Lower Hunter Water Security Plan, the community and stakeholders told us they expected their minimum demands for water should be met regardless of the severity of a drought. While they supported water restrictions playing an important role in response to drought, running out of water was not acceptable. Building and operating the Belmont desalination plant now would extend our ability to withstand a severe drought by about six months – materially reducing the likelihood our system runs out of water. One of the key advantages of desalination is that it's a rainfall independent source of water, which is safe and reliable regardless of changes in weather or climate.

Question	Response
	We are currently the only major coastal urban area in the country without a desalination plant to support the needs of our community and business in the region. Recent analysis has confirmed that a permanent Belmont Desalination Plant remains the most cost-effective option to ensure we can support our communities both now and during drought. The desalination plant is a long-term, essential infrastructure that will help underpin our region's water security for many decades. We've been clear in the Guidebook and Engagement Report for the Community Panel that water supply options included in the LHWSP are out of scope. That means we're not reopening consultation on whether a desalination plant is part of our future water supply options.
Quality of water: How do Hunter Water ensure the water flowing through on aged network of pipes is of good drinking quality when it gets to our households?	Hunter Water is committed to providing our customers with high quality, continuously safe drinking water. Our Operating Licence requires us to maintain and fully implement a drinking water quality management system that is consistent with the Australian Drinking Water Guidelines Framework for Management of Drinking Water Quality. We are audited annually against this Operating Licence. At Hunter Water we pride ourselves on providing safe and reliable drinking water to more than half a million customers in the region. An extensive drinking water quality monitoring program allows us to regularly monitor our supply. Sampling and analysis are undertaken using a National Association of Testing Authorities (NATA) accredited lab at 68 locations throughout the drinking water distribution system. This water quality monitoring is representative of the water supplied to customers and provides data on water quality supplied from pipes with a range of ages and material types. The results of this testing are summarised on our website.
$0 to $6 pa per household escalating every year to the year infinity?	Hunter Water wanted to provide context on the relative size of the decisions we are asking the Community Panel to make in forming its recommendations. The upper estimate of $6 each year, every year means: • $6 in 2025-26 • $12 in 2026-27 • $18 in 2027-28 • $24 in 2028-29 • $30 in 2029-30 That's a total of $90 over the 5 years. After 30 June 2030, we don't know whether bills will change or stay the same. We will need to continue to pay for some of the infrastructure that we've built that lasts a long time but we don't know whether other

Question	Response
	factors will change (e.g. interest rates). It is likely that the new bill that you have in 2030 becomes the 'new normal' for those things (i.e. stays at around $30 per year). Please also note that we have shown the estimated impacts on a typical household. How much a customer's bill goes up in response to increases in revenue requirement depends on factors such as concession status, whether they are a residential or business customer, owning (or buying) their own home or renting, and also how much water they use. The impacts on bills for other customer types may differ from the $6 each year, every year. See the Bill Impact Look-up Table provided on Day 2 for examples of the estimated annual increase for some other customer types.
Are we still fact checking? The Australian Press Club hosted an event earlier last week with keynote address delivered by MP Allegra Spender (economist), independent member for Wentworth (*most privileged Federal seat*) on the recent proposed Stage 3 Tax Cut Amendments. Co joining speaker at the event was Richard Denniss, whom among a host of relevant information said; "Australian personal income taxes aren't the highest in the world, they aren't even close. Indeed, according to the OECD for those on average earnings our income taxes are a lot lower than the OECD average. The same is true for Australians earning twice the average income." Richard Denniss: National Press Club Address January 31, 2024 Walter then went on to explain, "I thought I heard Greg Martin mention to the panel words to the effect - 'Australia has the highest personal tax rate in the world', while the counter argument put forth by other Economists mentioned suggests otherwise and that some industry sectors aren't paying nearly enough tax. Obviously Greg is well placed to preside over these matters, which seems to be pivoting the panel to focus around these other 'grey' areas."	Greg's observation was tangential to his key point he was making: **In the end *someone* has to pay.** State or federal government grants are transfers of funds. In the case of federal government grants, the funding (money) may come from income taxes collected from the Australian community. The government does not have unlimited funds. Ultimately, if the government gives out more money through grants eventually it'll have to raise taxes.

Hunter Water Community Panel – Day 3 questions

Topic: Bill impact look-up table

Question	Response
Leanne: How is it fair that households with one person (1 income + 1 water usage) pay the same as households with more incomes & more water usage?	We understand that it can be challenging to pay water, or other utility bills. We arrive at our proposed prices by considering the costs that we need to recover (revenue requirement) and considering price structures (how the costs are distributed among customers). Our price structures consider customer preferences, cost reflectivity and customer impacts. Sometimes it is challenging to balance all three factors. We also have a constraint (limitation) that makes us a bit different to some other water providers, including many in other States. Our revenue requirement for water services must be recovered from water charges and our revenue requirement for wastewater services must be recovered from wastewater charges. We can't mix the two together. The current mix of usage and fixed charges within a water (only) bill is around 80% variable and 20% fixed for a typical household. The fixed water charge is the same regardless of the type of home (house vs apartment) because the cost of providing service is similar. Extending this principle to businesses, the fixed water charge for businesses is a multiple of the fixed water charge for households, based on the water meter size. This approach to fixed water charges reflects the cost of service because most businesses use more water and therefore use more of our infrastructure. We will review the balance between fixed and variable water charges before we submit our pricing proposal in September 2024. For wastewater (sewerage) services, owners of apartments pay less than owners of freestanding houses, although we have been transitioning towards a common charge. We do not have a separate wastewater usage charge for households for several reasons. 1. Most of the costs of wastewater systems are fixed and do not change with the volume of wastewater discharged into the system. This means that if we include a usage charge in your wastewater bill it would be lower than the usage charge for water – possibly one quarter to one third of the price per litre. (see pages 24 of the 2025 Pricing Proposal Community Panel – Engagement Report for detail about our wastewater costs). 2. Wastewater would not be metered because it is very costly and technically difficult. Without a meter an estimate of a household's wastewater volume is needed. a. For example, Hunter Water could assume that 75% of water usage is discharged to the wastewater system and apply the usage charge to that amount. This percentage is known as the 'discharge

	factor'. It would apply to all households. There would not be a way for each household to have their own specific discharge factor (it would be impractical to administer the variation across 200,000+ customers). b. We have considered alternative ways to estimate household water usage e.g. number of toilets, or number of people in the household. All of these methods have pros and cons, mainly related to fairness and practicality. 3. We do not want to discourage good practices for health and hygiene, such as flushing the toilet after use.
Matthew F: Can I request HW update us on how many customers are in assistance programs. Page 15 of the Nov 2023 Engagement Report noted notes 1000-1500 customers are usually helped every year. Page 33 of the Nov 2023 Engagement Report noted there were 1170 being assisted, and that was growing by 60 customers a month. Is the number now closer to 1,350? And as a % - how many of your customers is in this group? Thx	We are still seeing a steady increase in customers needing extra support to manage their water bills. We are currently actively supporting 1,395 customers, in line with our previous statement of the monthly increase in customers that require support. The percentage of residential customers being supported through our program is 0.49% of our overall customer base.

Topic: Hot Spots

Question	Response
Shannon: When a hot spot comes about, how quickly is it responded to as a regulatory item? How long does it take to confirm that it isn't a Priority 1, and taken out of the business as usual requests?	Regulatory requirements are set in various places. When we talk about the service levels experienced by customers, we mean the requirements set out in Hunter Water's 2022-2027 Operating Licence, issued by the NSW Government and administered by IPART. Our Operating Licence sets mandatory minimum standards on the number of customers that can be affected by low water pressure, unplanned water supply interruptions or wastewater overflows in dry weather.

	Our Operating Licence only covers one of the three issues that the Community Panel is considering under the topic of hot spots (low water pressure). In the 18 months leading up to review of our Operating Licence, we engaged with over 2,000 people and around 70 businesses over two phases of customer engagement to obtain a contemporary understanding of customer, consumer and community views on service levels. We found that bad odours from the wastewater system and wastewater overflows during wet weather where important to customers and the community. However, we decided they were unsuitable to be included in the Operating Licence. As an example, wastewater odours are difficult to measure as they could occur anywhere in the system and weather conditions change who is affected by them. **Also, our Operating Licence sets limits on the proportion of customers that can be affected by low water pressure but not on the number of times any customer can be affected or how bad the water pressure can be (i.e. how far below the minimum).** In terms of response times, our initial response occurs as soon as possible after we are notified of an issue. We would consider this to be an operational incident and possibly a one-off situation. We only refer to the ongoing or recurring issue in a certain area as a 'hot spot' after there have been multiple (or repeated) verified occurrences of the problem over a period of time. The issue must have had occurred at least twice but more likely 3 or 4 times before it triggers more complex investigations and possible attempts at resolution. We may consider an area to be a hot spot in either of the following situations: • one customer notifies us that they have experienced the issue on several occasions • multiple customers notify us of experiencing an issue that we then identify as having the same cause. In terms of permanently fixing the problem at each hot spot, we have been "chipping away" (to reuse a phrase from the Fishbowl conversations on Day 2. For example, we are planning to fix some hot spots between 2025 and 2024 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 problems first (see page 41 of the 2025 Pricing Proposal Community Panel - Engagement Report for further details).

Hunter Water Community Panel – Day 4 questions

Topic: Carbon Reduction

Question	Response

Wally: If we meet the targets with investing $2 million that it would be done with carbon offsets, that they would then re-allocate the budget into locally based infrastructure that would feedback into the system permanently. If this would be power or trees etc.	• Hunter Water is currently on track to reduce our green house gas emissions by 75% in 2030 on a 2020/2021 baseline
	  ○ This will be achieved through our electricity contract. In 2030 all of our electricity will be certified renewable.
	  ○ As it stands in 2030 our residual emissions sources will be;
	  ▪ Fuel consumed in our vehicle fleet
	  ▪ Emissions from waste water treatment
	  ▪ Electricity emissions from the Belmont Desalination plant. Due to the timing, we will need a separate electricity contract for this new facility
	• Hunter Water could invest ~$1-2M to purchase renewable electricity for the Belmont desalination plant and achieve our target to achieve an 80% reduction in 2030. And/or:
	• Hunter Water could invest ~$1-2M in offsetting our residual 2030 carbon emissions in carbon offsetting, which could include;
	  ○ Purchasing carbon credits (like Australian Carbon Credit units) and/or planting trees on our own land

Deana: Where is Hunter Water at right now in relation to Net Zero?	• Hunter Water is on track to reduce our emissions by 75% in 2030
	  ○ We are on track to achieve this through;
	  ▪ The investments we've made in renewable energy at our facilities
	  ▪ The purchase of certified renewable energy
	  ▪ The projections for the electricity grid decarbonising
	• Since 2020 we have reduced our emissions by 11%
	  ○ The reduction is driven by;
	  ▪ The electricity grid decarbonising
	
	Our investments in renewable energy generation (i.e. solar panels at our facilities) have contributed about 6.5% to our total emissions reduction.