YARRA VALLEY WATER
CITIZENS' JURY INFORMATION PACK

Yarra Valley Water


PROPAGATION

Water and sanitation are essential services. With increasing population and changing weather impacting the wear and tear across the water and sewerage network, we need to continually invest to meet your needs now and into the future.

No one wants to pay what's needed for a 'perfect' network. But no one wants a network that is unreliable.

OUR CHALLENGE:

WE NEED TO FIND A BALANCE BETWEEN PRICE AND SERVICE WHICH IS FAIR FOR EVERYONE

HOW SHOULD WE DO THIS?

Thank you for taking part in Yarra Valley Water's Citizens' Jury and participating in making the difficult decisions for your community.

You have the opportunity to represent your family, friends, neighbours and the community in making a recommendation that will have an impact on Yarra Valley Water's services both now and into the future.

CONTENTS

Aboriginal acknowledgement

Yarra Valley Water proudly acknowledges the Traditional Owners of the land on which we work and live, and pay respect to their Elders past and present. We recognise and value that they have cared for and protected Country for thousands of generations. We also acknowledge and pay respect to other Elders within the community and recognise and value the continuing rich cultures and the contribution of Aboriginal and Torres Strait Islander peoples and communities to the Victorian community.

WELCOME FROM THE MANAGING DIRECTOR

Every five years, water utilities like Yarra Valley Water undergo an independent Water Price Review conducted by the Essential Services Commission (the Commission).

From the review, future service levels for water and sewerage services will be set as well as the associated prices to apply from 1 July 2018.

Thank you for agreeing to be part of our first ever Citizens' Jury. The Citizens' Jury is extremely important in helping us to find a balance between the service we offer and a price which is fair for everyone.

We have already completed some significant customer research. This is a summary of what we have uncovered:

Customers have told us that our core services are the ones that matter most. Primarily they want safe, reliable services – clean drinking water, reliable sanitation services and quick responses when something goes wrong. They want us to manage resources appropriately while keeping prices down and accommodating for future supply needs.

We know we don't have all the answers, and we are looking forward to working with the Citizens' Jury to explore the important issues that relate to providing our essential services. We are especially looking forward to hearing your recommendations for how we can best deliver a water and sanitation service that customers value – and the cost of that service.

Understanding what our customers see as a priority and their expectations of us is fundamental to our success. This is where you can help. The expectations of the services we deliver and the context within which we operate are changing at an increasing pace.

Melbourne is growing at a rate of over 100,000 people each year, and a changing climate can affect the performance of our infrastructure and future water supplies.

Meeting these challenges requires innovative solutions and trade-offs if we are to respond to our customers' desire to keep prices down. That's the challenge we need to meet.

Fortunately, our starting point is quite positive. Overall, both residential and business customers are satisfied with the services we offer and are confident we will meet their needs now and in the future – well over 80% give us a tick. But, understandably with general cost of living pressures, most people are not at all keen to see prices rise.

I hope the background information contained in this handbook will help you in your role on the Citizens' Jury. All of us at Yarra Valley Water value and appreciate the contribution you are about to make.

Pat McCafferty
Managing Director

WHO WE ARE

Yarra Valley Water is the largest water utility in Victoria in terms of customers served, providing essential water and sewerage services to more than 1.8 million people.

We manage almost $4 billion of infrastructure across approximately 4,000 square kilometres – our service area covers most of Melbourne's northern and eastern suburbs, from Wallan in the north to Warburton in the east. Figures 2 and 3 below that show Yarra Valley Water's service area in context of Melbourne and the municipalities within our service area.

We provide water and sewerage services to our customers through distributing water and collecting and transporting wastewater (sewage). We have entitlements to water from a number of catchments and desalinated water from the Victorian Desalination Plant at Wonthaggi. Our bulk water is delivered through Melbourne Water's bulk water supply system to our distribution system. Our customers' wastewater is collected through our sewerage network and is treated at Melbourne Water's eastern and western sewage treatment plants and our ten-local sewage and recycled water treatment plants. Our sewage treatment plants provide recycled water for fit-for-purpose household, business, open space (e.g., sporting grounds, golf courses) and agricultural uses.

Figure 1: quick facts and figures about Yarra Valley Water.

OUR ASSETS

9,469 kms of sewer mains	9,775 kms of water supply mains	
142 water pressure reducing stations	103 sewage pumping stations	319 kms of recycled water supply mains
44 water supply tanks	76 water pumping stations	9 sewage treatment plants

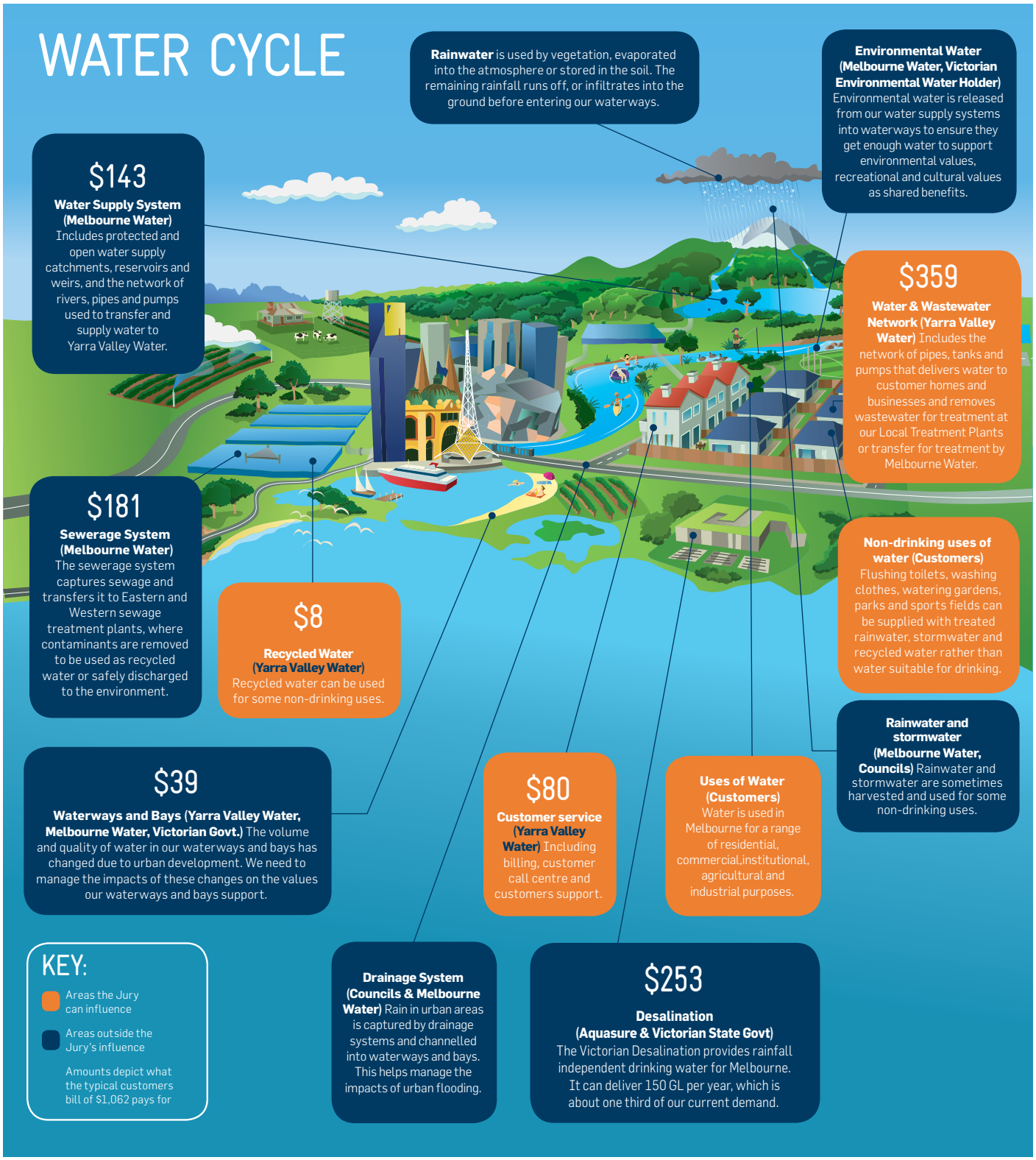
KEY STATISTICS

1.8 million population served	
712,451 residential properties	52,836 business customers
13,361 new customers in 2015-16	586 number of employees

Figure 2

Figure 3

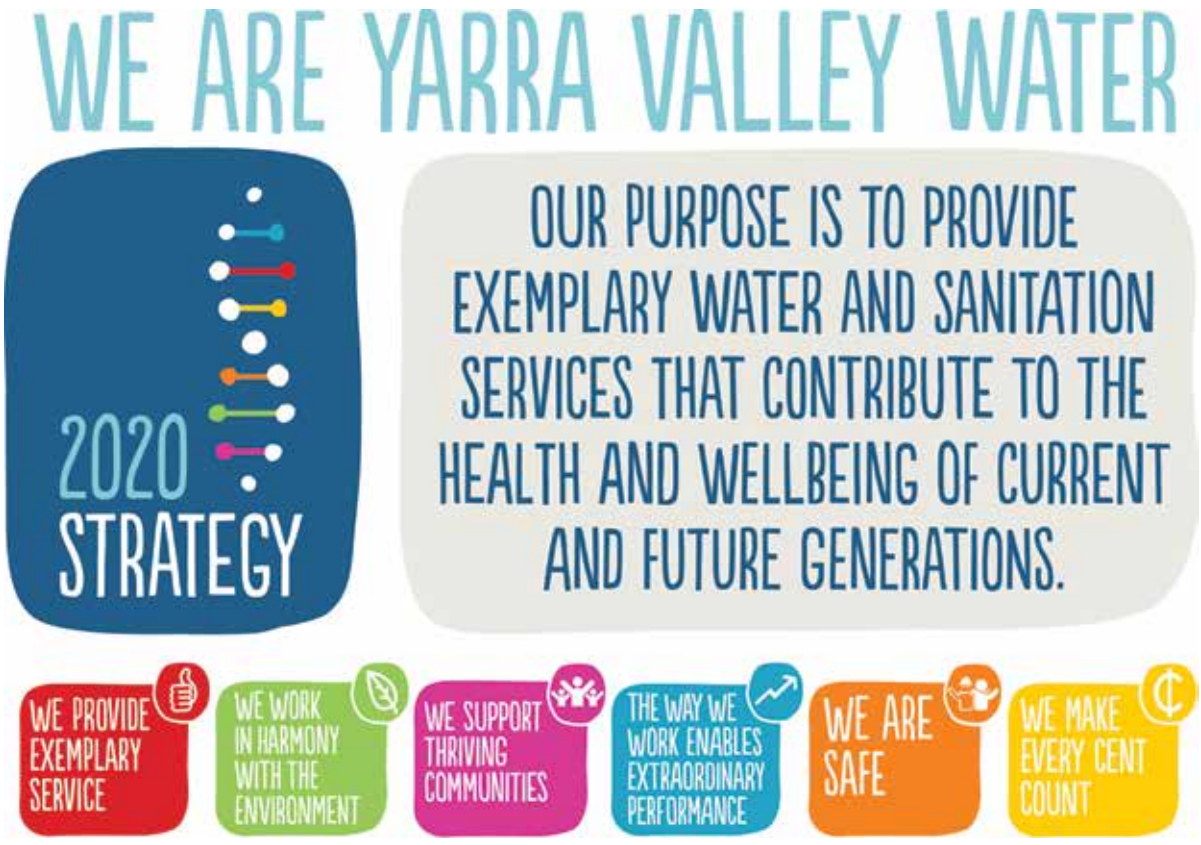
The picture below, shows the water cycle, the proportion of our customers bill (where appropriate) and the organisation with primary accountability.



OUR STRATEGY

Yarra Valley Water exists to enhance the liveability of our community, today and into the future. Our core purpose is to provide exemplary water and sanitation services that contribute to the health and wellbeing of current and future generations.

This purpose anchors our 2020 Strategy – the below image shows the key areas of focus. It encapsulates why we exist and guides everything we do. Our long-term commitment recognises that a healthy environment is vital to support a prosperous Melbourne, resilient to the impacts of population growth, climate change and drought.



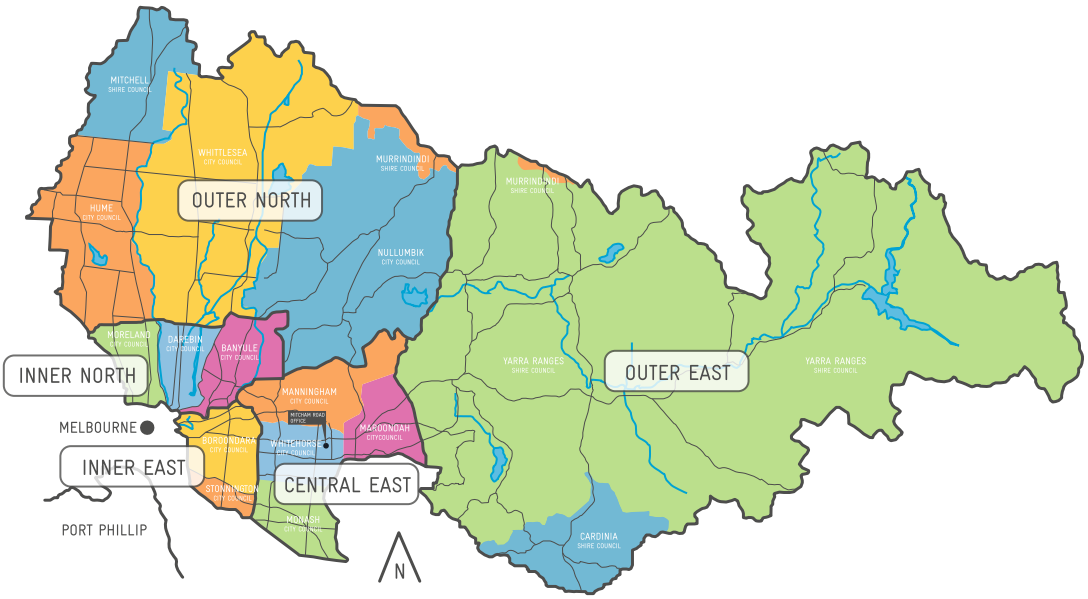
OUR CUSTOMERS

We serve a diverse population with the following attributes:

- 93% of customers are residential households. The remaining 7% are businesses
- 17% of businesses also receive trade waste services for the disposal and treatment of business waste and contaminants
- approximately 25% of customers were born overseas with the United Kingdom being the leading country of birth, followed by China and Italy
- 28% speak a language other than English at home
- 23% of our residential customers are tenants
- 94% of properties receive both water and sewerage services, the remaining 6% receive only water services
- 18% of residential customers live in flats, apartments and units
- 27% of customers have rainwater tanks and 2% have access to recycled water from our sewage treatment plants for non-drinking purposes
- 80% of our customers pay their bill before the due date, with a further 16% of customers paying after the final notice and prior to any other debt collection activity

The diagram below further illustrates the multicultural aspects of our customers.

Figure 4



BREAKDOWN OF DEMOGRAPHICS WITHIN THE YARRA VALLEY WATER SERVICE AREA

OUTER NORTH

Born in Australia	80%
Top country of birth (excl. Aust)	Italy, UK, India
Access to internet at home	76%
Speaks LOTE at home	34%
Top 3 languages	Turkish, Arabic, Italian

INNER NORTH

Born in Australia	83%
Top country of birth (excl. Aust)	Italy, UK, India
Access to internet at home	72%
Speaks LOTE at home	33%
Top 3 languages	Italian, Greek, Arabic

INNER EAST

Born in Australia	80%
Top country of birth (excl. Aust)	UK, China, NZ
Access to internet at home	81%
Speaks LOTE at home	23%
Top 3 languages	Mandarin, Greek, Cantonese

OUTER EAST

Born in Australia	70%
Top country of birth (excl. Aust)	UK, NZ, Netherlands
Access to internet at home	79%
Speaks LOTE at home	6%
Top 3 languages	Italian, German, Dutch

CENTRAL EAST

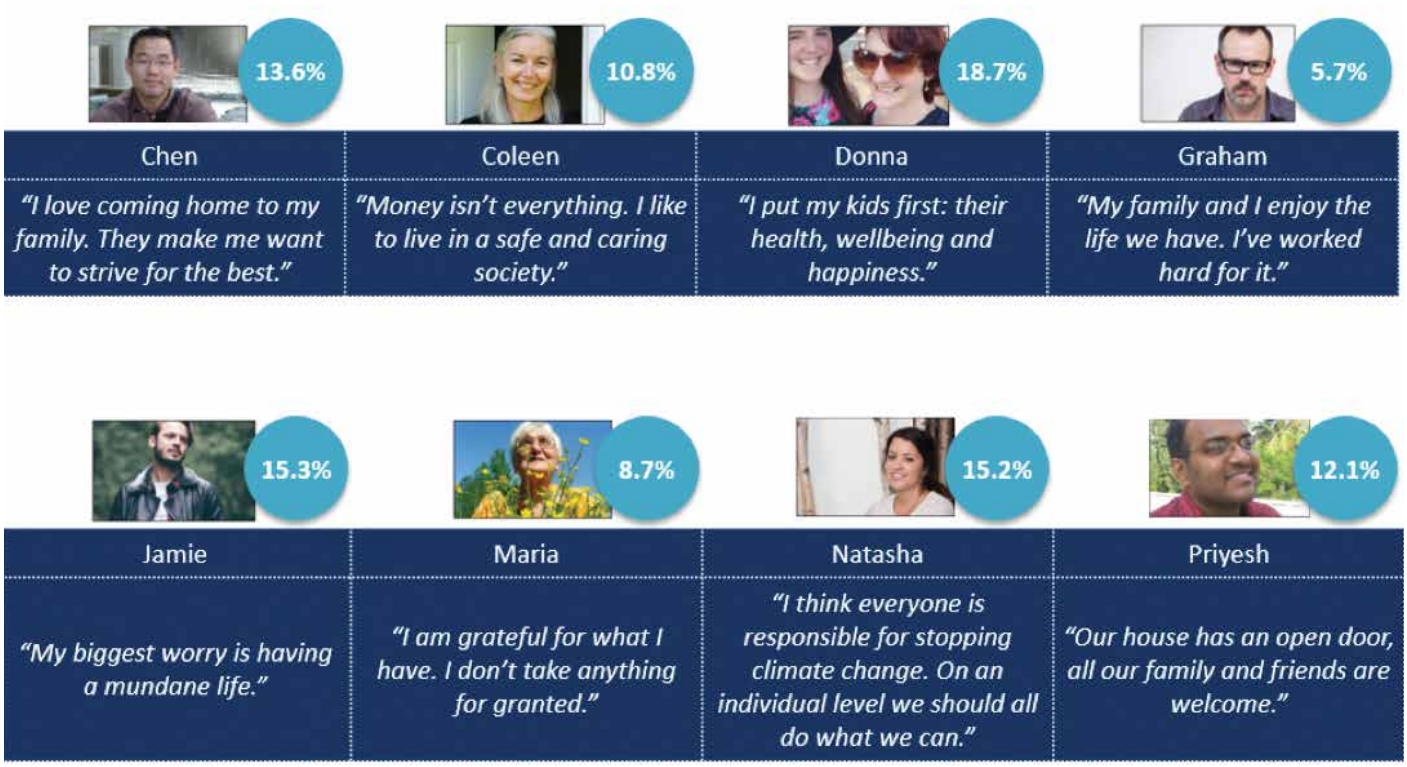
Born in Australia	85%
Top country of birth (excl. Aust)	China, UK, Malaysia
Access to internet at home	79%
Speaks LOTE at home	33%
Top 3 languages	Mandarin, Cantonese, Greek

We need to find a balance between price and service which is fair for everyone.
How should we do this?

- 0.7% of our customers are being assisted financially through our hardship support programs. Research by the welfare sector suggests that potentially half of our customer base are at risk of financial vulnerability if their circumstances (e.g., job loss) changed.
- 15% of customers are registered to receive an electronic bill
- 6% of customers have a regular payment arrangement established with us to pay either fortnightly or monthly
- 20% of customers receive a concession from Government
- each year we connect approximately 13,000 new properties
- aside from households and businesses, we also provide some products and services to plumbers, builders and developers associated with connections to our services
- 77% of customers have access to the internet at home

We have developed eight customer personas, below, to better understand what individuals value in their lives. These are based on deep research of the values of our diverse range of customers, helping us to put ourselves 'in their shoes' and to provide insight into how we can meet their needs.

Figure 5




Yarra
Valley
Water

WHAT OUR CUSTOMERS TELL US

For many years, we have sought customer feedback and input to ensure we understand customer views and needs.

Through our customer research and insights programs, we focus on listening to our customers and the communities we serve. These initiatives include:

- surveying customers about their experience of our service
- satisfaction surveys
- local community engagement on projects we undertake
- online and localised community forums to explore various issues
- analysis of our interactions with customers to see where we can do better

In response to what our customers have told us, we developed four key outcome areas. We then went back to customers and made sure that we had correctly understood what they had told us.

In summary, there are four areas that categorise our performance for customers. We are calling these the 'outcomes'.

Against each of those outcomes we have identified objectives as set out below.

OUTCOMES	OBJECTIVES
QUALITY WATER SERVICES	• Delivering high quality, safe, clean drinking water • Good water pressure.
RELIABLE AND TIMELY SERVICE	• Solving your issues when you contact us • Ensuring your wastewater is dealt with effectively • Delivering water with minimal interruption • Minimising inconvenience caused by interruptions to water and sewerage services • A timely response and restoration when water or sewerage services are interrupted • Providing services to new customers.
FAIR FOR ALL CUSTOMERS	• Charging customers fairly • Sharing risk through prices • Assist customers to avoid higher bills • Providing accessible services and helping customers having difficulty paying their bill • Guaranteed Service Levels.
CARE AND PROTECTION OF THE ENVIRONMENT	• Minimising carbon emissions • Ensuring waterways are protected • Providing modern wastewater systems (Community Sewerage) • Using water sensibly and ensuring sufficient water supplies for the future.

COMMUNITY AND STAKEHOLDER EXPECTATIONS

Having open conversations and trusting relationships with stakeholders who represent different groups of people and perspectives in the broader community is vital to successfully delivering our services.

Recently, we undertook a significant engagement and research program to identify:

- the expectations of the community and the things our customers value most
- the views of our employees and external stakeholders regarding our environmental and social impacts
- opportunities to improve our business and create greater value for our customers in the long term
- opportunities to address key Victorian Government water policy themes in Water for Victoria
- emerging risks and opportunities in our operating environment.

The following image shows the areas of importance to our different stakeholder groups.


YARRA VALLEY WATER
STATE GOVERNMENT OWNED
• Policy
• Governance
• Dividend
COMMUNITY SUPPORT ORGANISATIONS
• Affordability
• Reliable quality water supply and sanitation services
• Support for vulnerable customers
• Water security
DEVELOPMENT INDUSTRY
• Infrastructure costs
• Business efficiency
• Environmental sustainability
• Water security
LOCAL GOVERNMENT
• Community engagement
• Reliable, quality services
• Transparency, information sharing
• Water security
• Integrated planning
WATER INDUSTRY
• Drought and climate change resilience
• Affordability
• Liveability
• Workforce diversity
• Digital business
REGULATORS
• Improved environmental outcomes
• Drinking water standards
• Customer focus
• Efficiency
RESEARCH / THOUGHT LEADERS
• Community engagement & education
• Environmental sustainability
• Long-term planning
CUSTOMERS
• Affordability
• High quality drinking water
• Water security
• Water supply and sanitation services
EMERGING ISSUES
• Population growth
• Changing customer demographics
• Enhancing liveability
• Climate change resilience
• New technologies and intelligent water networks
WATER FOR VICTORIA
STATE GOVERNMENT WATER POLICY
• Climate change
• Jobs, economy and innovation
• Resilient and liveable cities and towns
• Water entitlements and planning
• Realising the potential of the grid and markets
• Waterway catchment and health
• Aboriginal values of water
• Water for agriculture
• Recreational values of water
UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS
• Goal 6: Ensure availability and sustainable management of water and sanitation for all.
• Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
• Goal 5: Achieve gender equality and empower all women and girls.

THE ROLE OF THE ESSENTIAL SERVICES COMMISSION AND THE PRICE SUBMISSION PROCESS

The Essential Services Commission of Victoria (the Commission) will undertake a review of the maximum prices that we can charge our customers for their water and sewerage services for the five-year regulatory period commencing 1 July 2018.

Following an extensive review to identify the pricing approach that would produce the best outcomes for Victorian customers, the Commission released its water pricing and approach paper in October 2016 and guidance paper in November 2016.

Key steps in the process in the preparation of our Price Submission are:

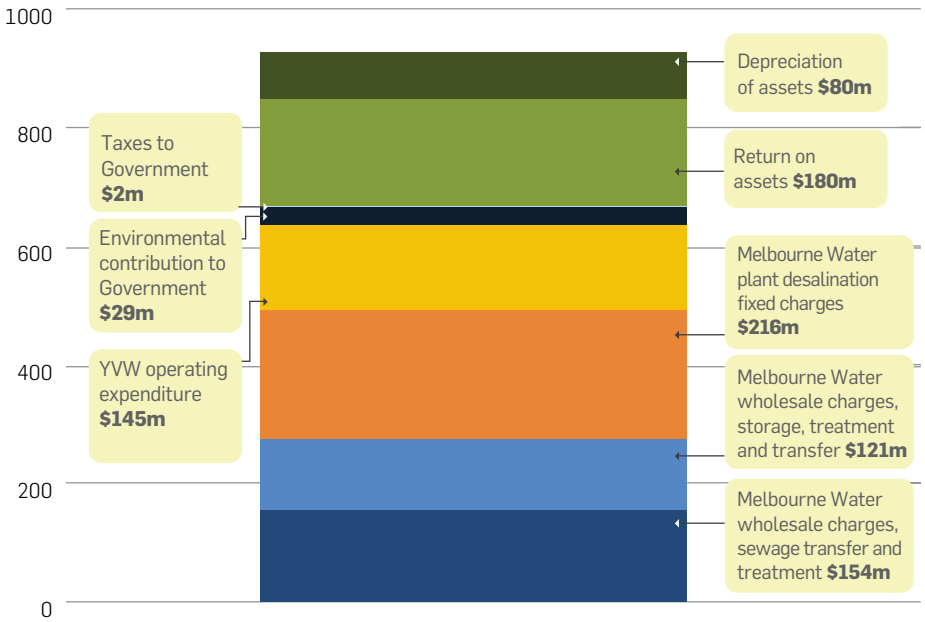
1. Engage with customers and community to inform the outcomes we propose to be delivered over the regulatory period The customer and stakeholder engagement undertaken to date is a key input for the Citizens' Jury to consider in makings its recommendations
2. Concurrent with the customer engagement we have estimated the cost to deliver proposed outcomes including obligations imposed by the Victorian Government, the Environment Protection Authority and Department of Health and Human Services. The outcomes and estimated costs will be finalised following the Citizens' Jury's recommendations
3. We will finalise the submission considering the following four elements:
   - Risk — Identify and manage any risks that may impact on customers prices or services and determine which party is best placed to manage the risk
   - Engagement — how effective was the water utility's customer engagement and has this been reflected in the submission?
   - Management — is there a strong focus on improving performance and efficiency? Are costs increasing, staying the same, or decreasing?
   - Outcomes — do proposed service outcomes represent an improvement, the status quo, or a withdrawal of service standards?

The price submission will be lodged by the 29th of September 2017. The Commission then undertakes a review of the submission and will make a final decision by June 2018.

HOW PRICES ARE SET

The Commission uses a "building block methodology" to determine the revenue we need to deliver service outcomes to customers and meet our regulatory obligations. Put simply, they look at all of our different costs to work out how much revenue we need.

Yarra Valley Water's revenue requirement for 2016/17
$926 million



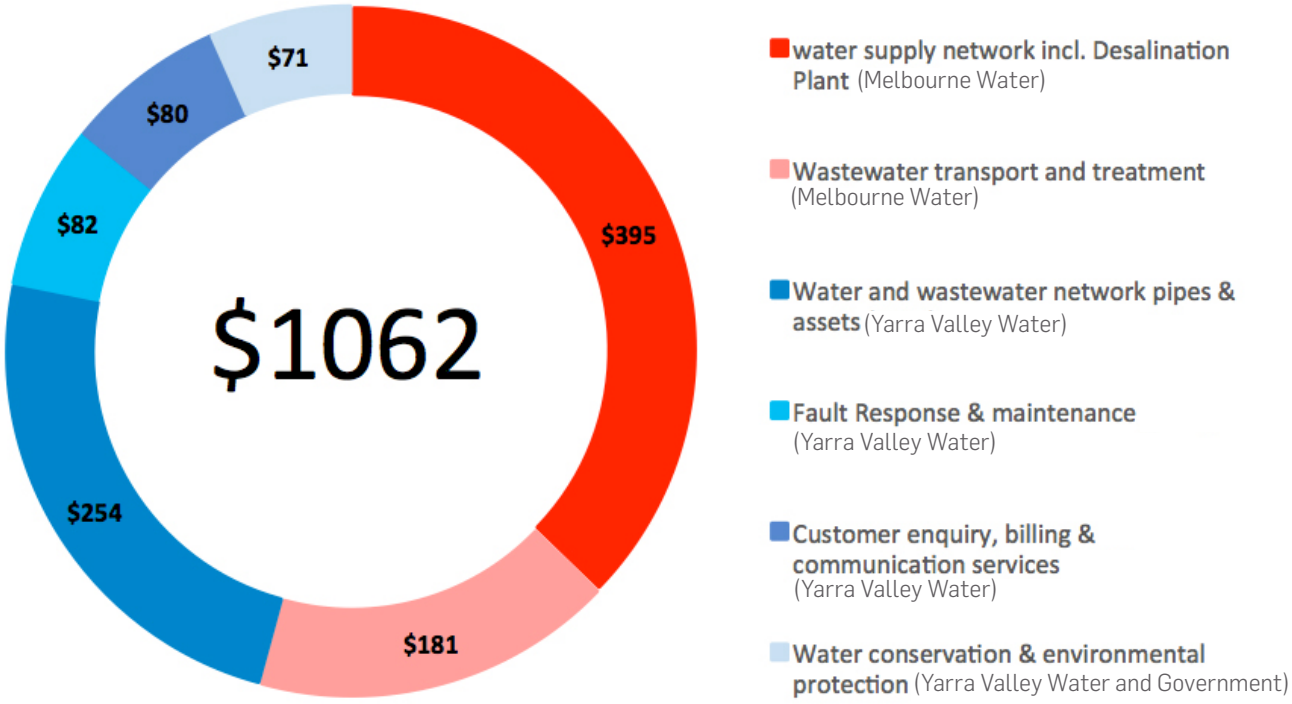
Definitions

Return on Assets: Our assets are valued at almost $4 billion of which 60% is funded by borrowings. We collect revenue to pay the finance costs on the money borrowed and also deliver a profit including a dividend to the State Government as our shareholder.

Depreciation of Assets: Allows us to recoup the cost of the asset over its useful life. Different assets have different life spans and the depreciation is calculated accordingly.

We need to find a balance between price and service which is fair for everyone.
How should we do this?

Cost components of the Annual Typical Bill

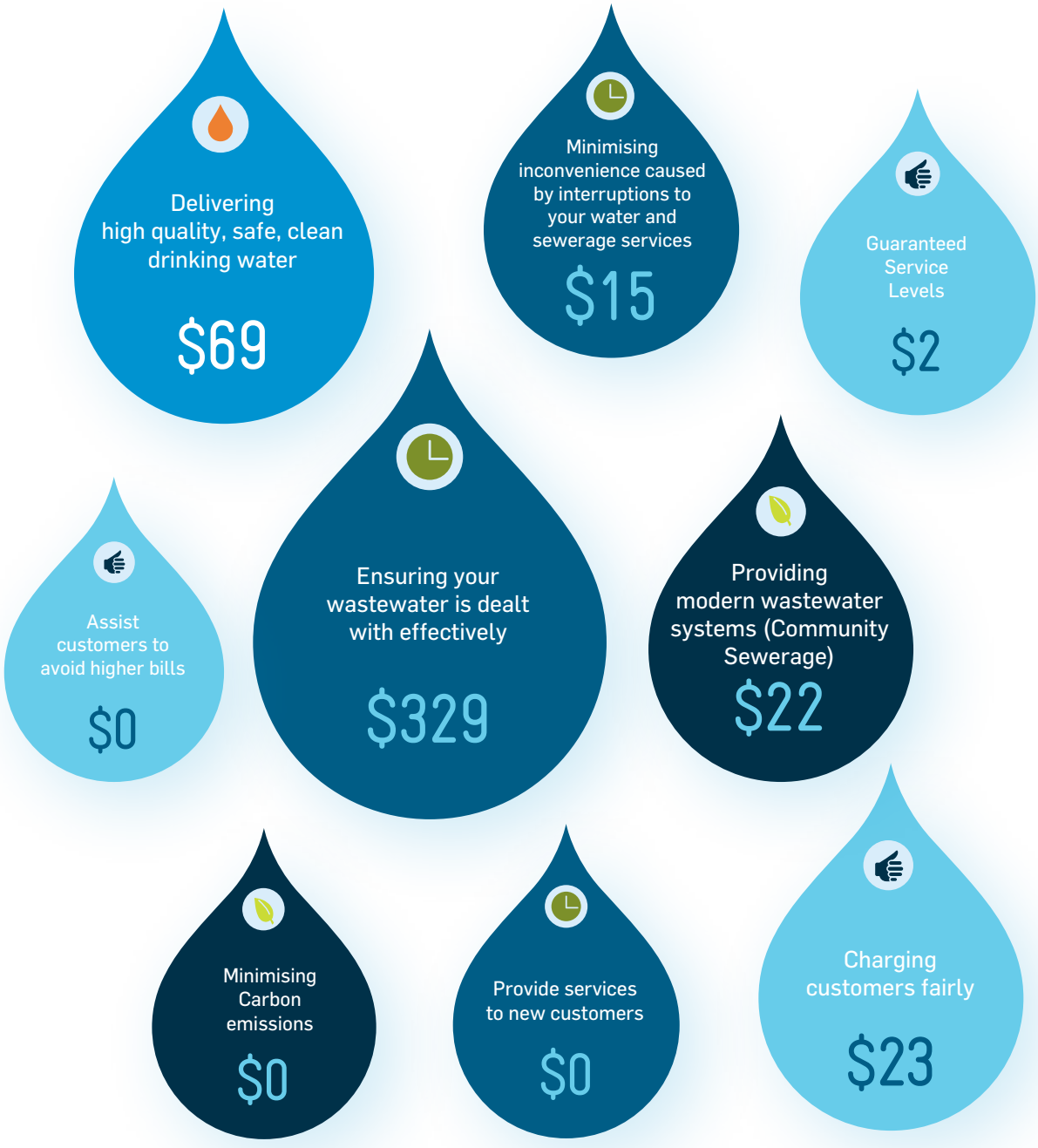


DID YOU KNOW?

Over the last ten years the average bill has doubled across Melbourne and also in most Australian capital cities primarily as a consequence of the Millennium drought and population growth. In Melbourne the costs incurred included:

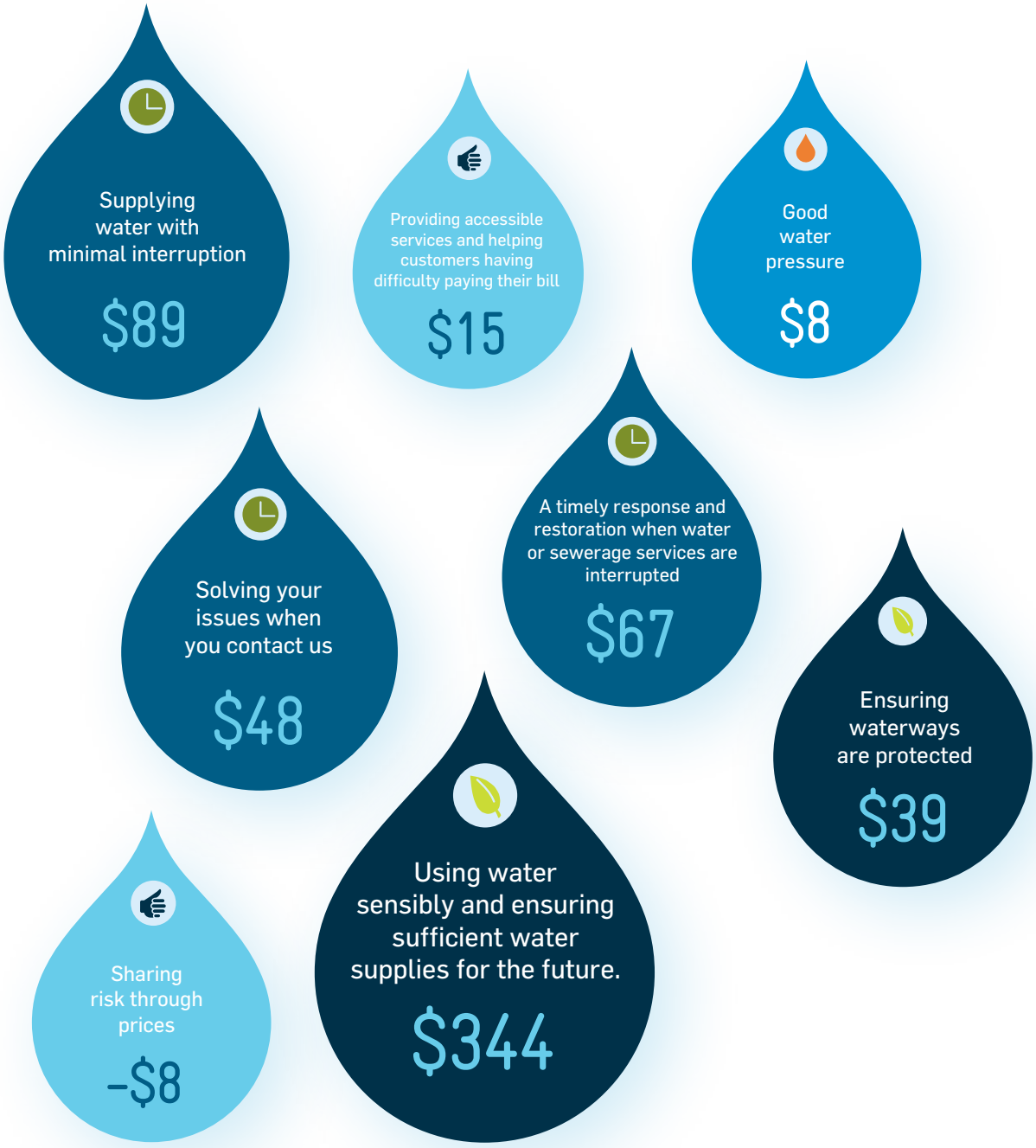
- new water supply assets built for Melbourne including the Victorian Desalination Plant and North South Pipeline (69%)
- increased capacity to Melbourne Water's major sewage treatment plants due to growth and increased standards for the production of recycled water (17%), and
- the replacement of existing and additional new assets to both maintain customer service outcomes and provide services to new customers (18%).

THE COST OF DELIVERING



We need to find a balance between price and service which is fair for everyone.

CUSTOMER OBJECTIVES



Total Typical Annual Bill

$1,062

HOW YOUR BILL CAN BE INFLUENCED

To deliver the existing levels of service our average residential bill in 2018/19 is forecast to be $1,103 and increase by inflation for the following four years.

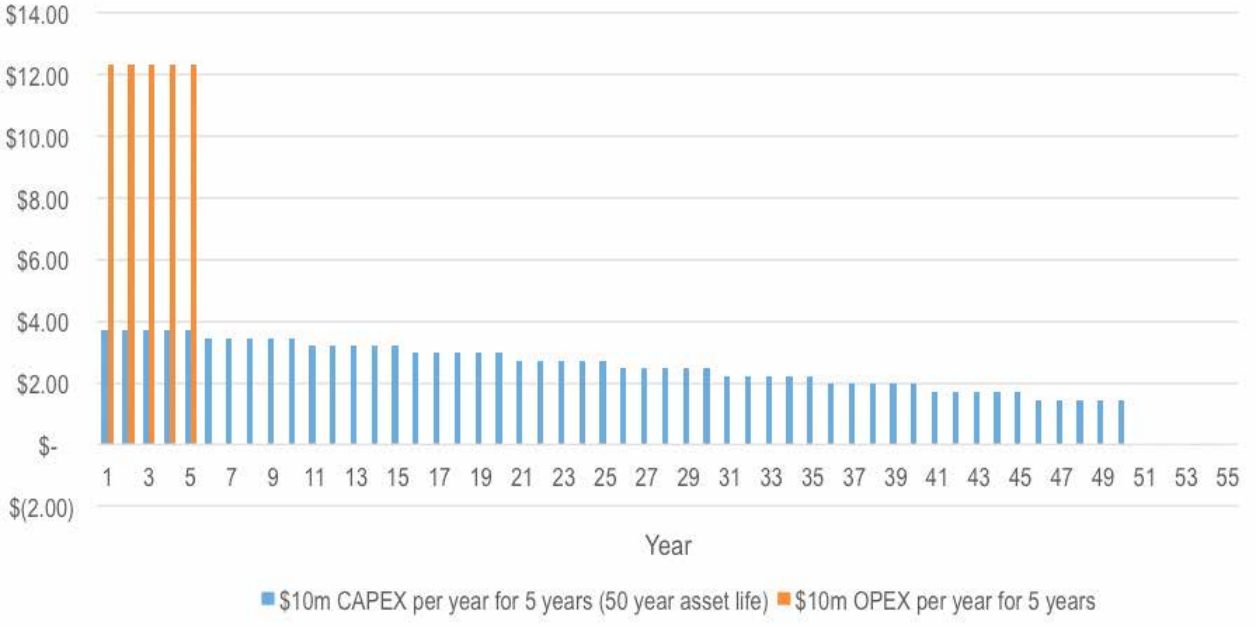
The following actions can reduce the bill by $10:

- $8.6 million reduction in operating expenditure or increase in revenue from new activities
- $160 million reduction in capital expenditure

Figure 6 shows the price impacts in a change operating expenditure compared to capital expenditure (where an asset is built/ purchased). In this example, there is a change in operating expenditure of $10 million per year for five years and for capital expenditure there is a $50 million investment in the first five years. The asset is assumed to last 50 years.

In the case of operating expenditure this results in a bill change of $12.34 for five years. Compared with capital expenditure, the cost of the investment is recovered over the 50 years and includes an allowance for the financing cost of the asset. In the first five years, the bill change is $3.68, and falls thereafter.

Figure 6: Change in customer bill for a $50 million spend



We need to find a balance between price and service which is fair for everyone.

How should we do this?

See examples (to the right) of specific opportunities to influence customer service levels and the bill. These will be explored further throughout the Jury process.

OBJECTIVE	ACTIVITY	RANGE OF BILL IMPACT
Delivering high quality, safe, clean drinking water	Amount of water main cleaning to remove sediments in the pipes that can cause customer complaints	- $0.50 to +$0.50
	Extent of filtering of the water supply by Melbourne Water to remove sediments that can cause customer complaints	$0.00 to +$75
Solving your issues when you contact us	Speed of answering customer calls	- $2 to +$1
	Length of time to respond to customer letters and emails	-$0.50 to +$1
Supplying water with minimal interruption	Change the level of maintenance or replacement of water and sewerage pipes that impacts the total number of customers affected by service interruptions	-$5 to +$13
Ensuring your wastewater is dealt with effectively		
Minimising inconvenience caused by interruptions to your water and sewerage services	Extent of ongoing communications with customers whilst experiencing an interruption to a service	$0 to +$2
	Speed and materials used to restore work sites including nature strips, paths and roads	-$1 to +$3
A timely response and restoration when water or sewerage services are interrupted	Change the number of maintenance crews on the road that will impact the speed of response to water main bursts and leaks and sewerage blockages and spills	-$8 to + $30
Charging customers fairly	Extent of bill collection actions for customers who refuse to pay their bill	-$1 to $1
Providing accessible services and helping customers having difficulty paying their bill	Level of communication with customers about our assistance programs	-$1 to +$1
	Extent of support for customers having difficulty paying their bill	$0 to +$3

THE CHALLENGES WE ARE ADDRESSING

We are a customer service organisation, with the purpose to provide exemplary water and sanitation services that contribute to the health and wellbeing of current and future generations.

To achieve this purpose, we need to balance both short term needs and take a longer-term perspective when making investment decisions.

The challenges we face include:

CLIMATE CHANGE AND WEATHER VARIABILITY

The world's climate is changing and the future is uncertain with more extreme events and temperature variation predicted.

Victoria has not been immune from these changes in climate. The last 30 years have seen significant changes in temperature and rainfall compared to the long-term records.

We need to be prepared for changing climate conditions. In addition to increasing temperatures and decreasing rainfall, which are expected to continue, there are several other changes predicted by the CSIRO and Bureau of Meteorology to occur in the future. They include:

- reduced stream-flows into water catchments
- increasing average and minimum temperatures
- more frequent and intense droughts
- increased severity and intensity of storms and bushfires
- more frequent and intense heatwaves
- more intense rainfall events

Some identified risks of climate change to the water sector include:

- insufficient water supply and reduced water quality
- a major bushfire in critical water supply catchments
- increased asset deterioration
- decreased waterway and aquatic ecosystem health
- increased flash flooding

The risks highlighted above have significant implications for water utilities. These risks also have implications for the communities we serve as they can impact service reliability and affordability.

The multi-year Millennium drought (1997–2009) led to the construction of major water supplies expansion works for Melbourne including the desalination plans and north-south pipeline.

With the potential for climate change and weather variability to impact the services we provide and the cost to deliver our service to customers, we will need to consider every scenario to ensure we are prepared.

SERVICING AN INCREASING POPULATION

We provide services to approximately 30% of the Victorian population. The population in our region is expected to grow by more than 500,000 people (25%) by 2036. At the same time, we expect urban areas to become more densely populated because of subdivision and multi-storey developments.

The busier Melbourne gets and the more homes and businesses we have in our area, the greater potential for disruption to the community from our works (such as emergency works to repair a burst water main or planned works to upgrade old infrastructure).

We need to find a balance between price and service which is fair for everyone.
How should we do this?

CREATING URBAN AMENITY FOR COMMUNITIES

The Millennium drought had significant impacts on our customers and the community we serve, including social dislocation – through the loss of community amenities such as parks and sporting grounds.

The Victorian Government's Water for Victoria plan aims to build a resilient and liveable Melbourne using an integrated water management approach that includes ensuring green open spaces that are resilient to a drying climate and severe drought.

Increasing use of alternate water sources such as recycled water and stormwater to support these community assets is the primary strategy, however sometimes this can be challenging and incur additional costs, especially in existing suburbs compared to new suburbs.

WORKING IN HARMONY WITH THE ENVIRONMENT

Our focus is on the three areas where we have the biggest impact and best opportunity to make a significant difference to the environment – greenhouse gas emissions, water and nutrient discharges to our waterways, and the amount of water that we take from the environment.

To tackle the causes of climate change, we have an aspiration to generate all the energy we use by 2025.

CHANGING CUSTOMER EXPECTATIONS

Our customers' expectations continue to evolve.

At a minimum, our customers want a continuous supply of safe clean drinking water and safe removal of waste. Customers also expect us to maintain the quality of our service and manage future challenges such as population growth, ageing infrastructure, affordability, and climate change.

We anticipate that customers' expectations will continue to change and evolve, partially due to the way customers are serviced through new technologies.

KEEPING BILLS AFFORDABLE

Our research shows that most customers are not willing to see any increase in bills to further improve levels of service. Additionally, half of our customers say they have struggled to pay their utility bills (including energy, telecommunications, etc.) in the last 12 months.

Increasingly, we find it's necessary to provide support for customers who are having difficulty paying their bills or are in circumstances that make them vulnerable due to changing personal circumstances. To be effective, we believe we need to work with other utilities, government agencies and the not for profit sector to provide an integrated support program for these customers.

While the average water bill in Melbourne is the lowest of all Australian capital cities, our water bill is higher than those of the other Melbourne water retailers. We are aiming to keep bills as low as possible. At the same time, providing our services and investing in infrastructure generates employment across our service area.

AGEING NETWORKS OF PIPES AND ASSETS

Our assets service multiple generations as a lot of our infrastructure can last for up to 100 years. The water and sewerage network is expanding to service new suburbs and we are renewing old assets each year. There is a small proportion of our network that is nearing the end of its life, and is required to be replaced before it starts to fail because there are significant community impacts when they do fail e.g., a larger number of customers without a water supply or major local community disruption.

We also have a significant length of smaller pipes, built in the 1940-50s to service significant population growth in Melbourne at that time which will start to fail and will require replacement over the next 20 years. In the short to medium term, the challenge will be how to maintain existing customer service levels without significant cost and customer bill impacts.

On a comparative basis, our infrastructure experiences more water leaks and blockages than other water utilities due to their age, types of soils in our area, higher water pressure and the number of trees.

ISSUES WE WANT YOUR VIEWS ON

We need to find a balance between price and service which is fair for everyone.
How should we do this?

Under our four key outcomes of quality water services, reliable and timely service, fair for all customers and care and protection of the environment, we have identified 18 areas where we would like your views on either the service we deliver or the approach that we take to deliver that service.

These areas represent the essence of the services we provide customers and whilst presented as discrete topics, should be considered holistically and may support the achievement of multiple outcomes.

Throughout this document we raise a series of questions for your consideration and want to understand your perspective and preferences. Your views will help us to make decisions and balance priorities as we develop our price submission to the Commission. Each area and the questions are summarised over the following few pages.

DELIVERING HIGH QUALITY, SAFE, CLEAN, DRINKING WATER

We understand that drinking water quality is, and always will be, a key driver of customer satisfaction. We know we must be ever vigilant in protecting public health by ensuring our water is safe. Recent incidents overseas in the USA (Flint, Michigan) and New Zealand (North Havelock) reinforce the consequences where safe drinking water is compromised.

Historically, we achieve 100% compliance with drinking water quality regulations and standards. In 2015/16, we achieved compliance in 30 of 32 locations. In both instances where compliance was not achieved, the water supply was isolated, disinfected, and retested to ensure it was safe before supply was resumed – there were also no reported incidents of illness.

The water quality issues experienced by our customers generally relate to its taste, smell or appearance. We refer to these as aesthetic water quality issues.

- **What is meaningful to you as a measure of water quality?**
- **To what extent should we promote the health and environmental benefits of drinking tap water compared to bottled water and other beverages?**
- **To what degree should we focus on reducing water quality complaints?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**[1]
- **Is there something else we should do?**

Please refer to page 33 for further details.

GOOD WATER PRESSURE

Our water supply network is designed to deliver a continuous flow of water and good water pressure to homes and businesses. Depending on the elevation of the property, the pressure and flow varies across our network as do customer expectations. In most cases where customers complain, their expectations are higher than the minimum flow standard set in the Commission's Customer Code.

- **How should we best meet customers' expectations of water pressure?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there something else we should do?**

Please refer to page 36 for further details.

1 Customer rebates are paid to an individual customer when the service they receive is below the minimum level (guaranteed service level)

ISSUES WE WANT YOUR VIEWS ON

SOLVING YOUR ISSUES WHEN YOU CONTACT US

Our customer contact centre in Mitcham handles bill related enquiries, calls, letters and emails, from 8am to 7pm Monday to Friday (excluding public holidays) and our faults and emergency calls are answered 24 hours a day, 365 days a year.

In 2015/16, the customer contact centre averaged about 11,600 interactions per week.

The primary measure for performance is the number of calls answered within 30 seconds, however our approach is to prioritise resolving customers' enquiries rather than the speed at which we answer the call. In addition, we measure response to letters and emails and other forms of customer enquiries.

- **What is the appropriate balance between 'first call resolution' and answering the phone call within a timely manner?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there anything else we should do?**

Please refer to page 39 for further details.

ENSURING YOUR WASTEWATER IS DEALT WITH EFFECTIVELY

Customers have little tolerance for wastewater service interruptions. When they do occur, they expect that once the service is fixed they won't experience repeat issues.

We manage 9,500 kilometres of sewer pipes, 103 pump stations and ten sewage treatment plants which remove wastewater from households, industry and commercial businesses. The wastewater is treated so that the water can be either reused or returned to waterways or the ocean.

Disruptions to a customer's service can take many forms, such as:

- toilets, sinks or laundries which are slow to drain or do not drain at all
- wastewater spilling onto the ground and or sometimes into customers' properties

These disruptions are usually caused by some sort of blockage in the customer's pipes or our sewerage network, often as the result of tree-roots. Options to improve performance regarding blockages and interruptions are to increase:

- the amount of sewer pipe maintenance and renewal each year by changing when a pipe is identified for placement on the renewal program
- education programs to prevent blockages in both customer pipes and our pipes

- **To what extent should we increase expenditure, if at all, to decrease the number of repeat interruptions, reduce odour complaints and community safety risks?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there something else we should do?**

Please refer to page 41 for further details.

DELIVERING WATER WITH MINIMAL INTERRUPTION

Customers accept that water supply interruptions occur from time to time but they also expect us to fix it once with no repeat issues. Our drinking water networks consists of 9,700 kilometres of water pipes, 44 water tanks, 76 pump stations and 142 pressure reducing stations. Customer service may be interrupted by:

- an unexpected event (unplanned) such as a water main burst due to the age and condition of the pipe – caused by:
  - broken pipes
  - changes in water pressure
  - movement in ground conditions due to changes in weather
  - accidents, especially vehicle collisions with water hydrants
- a planned maintenance activity (where we give customer prior notice of the works) such as a water main renewal or, water main cleaning and inspection

- **To what extent should we increase expenditure, if at all, to decrease the number of repeat interruptions that customers experience?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there something else we should do?**

Please refer to page 44 for further details.

We need to find a balance between price and service which is fair for everyone.
How should we do this?

MINIMISING INCONVENIENCE CAUSED BY INTERRUPTIONS TO WATER AND SEWERAGE SERVICES

Customers may experience interruption to service caused by unexpected events such as a water main burst and sewerage blockage. We also have scheduled maintenance activities that affect customers, these are referred to as planned interruptions.

There are several ways that we try to reduce the inconvenience caused by our works, including the days and times that we conduct works, coordinating works with other authorities, the provision of alternative water supplies and communication to keep customers informed so they can plan their lives around the works.

- **To what extent should we increase expenditure, if at all, to improve our ability to proactively communicate to customers during an interruption to their water or sewerage service?**
- **Do you support increased expenditure to better meet customers' expectations regarding site (e.g., nature strip) restoration?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there something else we should do?**

Please refer to page 47 for further details.

A TIMELY RESPONSE AND RESTORATION WHEN WATER OR SEWERAGE SERVICES ARE INTERRUPTED

We generally rely on our customers and others to tell us when there is a fault in our water and sewer networks. All service interruptions reported to us are recorded in our central system and prioritised according to severity, location and the number of people impacted by each incident. The customer will be advised of an expected 'attendance' time for the fault. Due to population growth, with its impacts on traffic congestion, we will need more crews to maintain the existing response times for unplanned interruptions. In addition, the community expect that all interruptions where there is a visible loss of water be fixed quickly.

Over the past two years we have experienced a decline in response and restoration when water or sewerage services are interrupted due to an increase of approximately 15% in the number of interruptions occurring and in the short term as a consequence of a transition to a new maintenance contractor.

- **Given the recent decline in the timely response to service interruptions, we propose that for our Price Submission we commit to the average performance levels for the periods not affected by the transition to the new contractor. Do you agree?**
- **To what extent should we either reprioritise or increase expenditure, to meet customer expectations where there is a visible loss of water?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there something else we should do?**

Please refer to page 49 for further details.

PROVIDING SERVICES TO NEW CUSTOMERS

There are two types of growth that occur – "Greenfields" and "Infill".

Greenfields growth typically occurs on the fringe of Melbourne as new suburbs are built. This usually involves turning paddocks into suburbs.

Infill is growth which occurs in already established suburbs, which makes them more densely populated, such as through the development of multi-story apartments.

The La Trobe National Employment Cluster (NEC) is an example of a major urban renewal project where an integrated approach to planning water services could include recycled water. An additional 40,000 dwellings are expected here by 2050.

- **Should the La Trobe NEC Development include recycled water, if so, to what extent should the additional costs be paid for by developers, La Trobe NEC customers and all customers?**

Occasionally, our existing assets and the land they are on, are no longer needed. When we sell them, we seek to maximise the value of the land for the benefit of all customers.

- **Under what circumstances should we consider developing land to maximise value for our customers?**

Please refer to page 51 for further details.

ISSUES WE WANT YOUR VIEWS ON

CHARGING CUSTOMERS FAIRLY

For each price submission, we re-engage with customers to explore opportunities for the way we charge. Some customers and stakeholders have suggested options for pricing reform and the welfare sector are encouraging us to explore tariff options aimed at benefiting vulnerable customers.

- **Which if any price reform options are worth pursuing?**
- **Are there other options that should be investigated?**
- **What is an acceptable increase in a customer's bill due to price reform?**
- **How could we mitigate against the risks to those negatively impacted by changes?**

Please refer to page 55 for further details.

SHARING RISK THROUGH PRICES

Prices and the method (price control) in which prices are adjusted each year are set at the start of each regulatory period (every five years). We currently use a 'revenue cap' form of price control that ensures we have sufficient revenue to cover our costs but also ensures customers do not pay more than required. For example, in the last three years, customers have used more water than forecast and we have returned $19 million to customers through lower prices.

- **What is an appropriate form of price control?**
- **If we retain a revenue cap:**
  - **Is the current constraint of a 2% annual price rise reasonable?**
  - **Should the elements included in the revenue cap be expanded?**
- **Our revenue requirement is set for the duration of the regulatory period with prices adjusted on an annual basis. What factors or situations should we consider in an annual adjustment to prices?**

Please refer to page 59 for further details.

ASSIST CUSTOMERS TO AVOID HIGHER BILLS

With Melbourne's population set to almost double within 50 years and scientists forecasting more extreme droughts, the water utilities in Melbourne are working together to find new ways to improve our water network and ensure it operates even more efficiently. More real time customer water consumption information will help the utilities better plan infrastructure maintenance and upgrades.

Our existing mechanical meters haven't changed much since the 1940s, but now we're considering upgrading to digital water meters. This technology will help detect leaks and even alert customers if their home or business has a hidden leak.

Because it's digital, it will enable greater access to near real time information that will help customers have more control of their water use and bill, rather than waiting for three months to get their quarterly account.

Access to more timely water consumption information will help us respond to water interruptions and better plan infrastructure maintenance and replacements.

We are working with the other water utilities in Melbourne to determine if it is the right time to start moving towards digital metering. Our objective is that digital metering will be implemented if there is no price impact on customers and there is customer support.

- **What value do you believe that digital metering will deliver to customers?**
- **Under what circumstances would you support the implementation of digital metering in this price submission period?**
- **Is there anything else we should consider?**

Please refer to page 60 for further details.

We need to find a balance between price and service which is fair for everyone.
How should we do this?

PROVIDING ACCESSIBLE SERVICES AND HELPING CUSTOMERS HAVING DIFFICULTY PAYING THEIR BILL

Like most organisations, we have a standard approach to billing and debt collection activities for customers. For most customers, these processes are effective, however some customers do have difficulty paying their bills. Helping those in need is challenging as it requires understanding individuals and their personal circumstances. We have a fundamental position that access to essential water and sewerage services should not be compromised by a customer's inability to pay for these services.

We have found that if we better understand the barriers to inclusion for our customers and then proactively establish communication and support programs to address these, this results in better outcomes for individuals as well reducing our costs in the long term.

Distinguishing between those customers who "can't pay" as opposed to those who "won't pay" is a key focus when it comes to following up debts. For those who "can't pay", we work to ensure that we provide effective support to help them deal with their circumstances and ensure their access to our services is not affected.

There is no "one size fits all" solution.

- **Is our billing and collection approach appropriate?**
- **Under what circumstances should we:**
  - **restrict the water supply to customers who don't pay their bills**
  - **charge interest on the bill to increase the rate of collection?**
- **What else should we do to support vulnerable customers?**
- **Do you support the investment of $3 million over five years for programs supporting customers who have difficulty accessing our services?**

Please refer to page 62 for further details.

GUARANTEED SERVICE LEVELS

Guaranteed Service Levels define our minimum commitment to deliver a specified service level to individual customers. For each Guaranteed Service Level, we provide a rebate on bills to those customers who have received a level of service below the guaranteed level.

- **What is the appropriate balance for the different drivers of a Guaranteed Service Level scheme? The different drivers include:**
  - **being aligned to what customers most value and when service failures inconvenience them most,**
  - **when the Guaranteed Service Level is not met, ensuring the rebate amount is appropriate**
  - **providing a balance between payments to a customer for the inconvenience they experienced compared to an incentive to us to resolve the underlying service failure.**

Please refer to page 67 for further details.

ISSUES WE WANT YOUR VIEWS ON

MINIMISING CARBON EMISSIONS

To tackle the causes of climate change, we have an aspiration to generate all the energy we use by 2025. We have made a pledge to the Victorian Government to achieve a 64% reduction in greenhouse gas emissions by 2025. We aim to achieve these outcomes with very little impact on the prices our customers pay.

While we need to ensure we are meeting the Government requirements to reduce carbon emissions, we are committed to doing the best we can. Over the past seven years, we have used our Showerhead Exchange Program to fully offset our Greenhouse gas emissions. The offsets generated by this program will be fully exhausted shortly.

1. We have established a three-step energy and environmental strategy that has us investing in **Energy efficiency** programs to **reduce** emissions
2. **Renewable energy** projects to **avoid** emissions
3. **Carbon abatement** activities which **offset** any remaining emissions

Our plan to achieve our emissions reduction is underpinned by two major projects that will enable us to meet our emission reduction targets. These projects are a second waste to energy facility and a joint investment in a large scale renewable power station with other water utilities.

We estimate the cost of meeting our pledge to be less than $0.30 per customer each year.

- **Is our approach to meeting our 'pledge' appropriate?**
- **Is there anything else we should consider?**

Please refer to page 71 for further details.

ENSURING WATERWAYS ARE PROTECTED

The main aim of the sewerage network, is to contain wastewater while it makes its way to treatment plants. The Environment Protection Authority regulates any discharges from our treatment plants and any spills to the waterways and other environmental impacts associated with our operations e.g., odour. They issue us with individual licences for each treatment plant that set the standards and also ensure compliance with environmental standards.

Sometimes the sewerage network is unable to cope with stormwater that gets into it during heavy rainfalls and this diluted wastewater spills into local waterways. We have historically built larger sewers to resolve these issues and these can be quite expensive and don't always lead to improvements in waterway health. We have been exploring a different way to address this challenge that reduce costs and achieve better outcomes.

While some customers are supportive of us increasing our work to protect and care for the environment, the majority feel that it is more important that we don't increase prices because of this work. Customers have told us that there is limited understanding of the work that we do in this area.

- **Would you value us taking an alternative approach to resolving environmental issues for waterways?**

Please refer to page 73 for further details.

PROVIDING MODERN WASTEWATER SYSTEMS (COMMUNITY SEWERAGE)

Many homes in the northern and eastern suburbs use septic tank systems to manage their domestic wastewater. Of these systems, which are the responsibility of the property owner to maintain, approximately 6,300 are not capable of meeting current environmental standards and present a potential risk to public health and the amenity of local waterways.

Historically we have built a sewerage network to service such properties but this can often be expensive and not all members of that community want it. We have the ongoing challenge of how we deliver a solution that is cost effective and acceptable to the majority of the community.

- **What services should we provide to customers on existing septic tank systems?**
- **How do we encourage customers to connect once the service is available?**

Please refer to page 76 for further details.

We need to find a balance between price and service which is fair for everyone.
How should we do this?

USING WATER SENSIBLY AND ENSURING SUFFICIENT WATER SUPPLIES FOR THE FUTURE.

How we use water and the different supply options influence our long-term water availability. Our approach is a balance between supporting our customers to use water sensibly for the things they value through to ensuring any new sources of water are introduced at the appropriate time and are efficient.

Customers want to know we are planning ahead, supporting sensible water use and investing in infrastructure to safeguard our services to prevent high costs in the future. Our key challenges are population growth, climate change and weather variability, at the same time ensuring parks, gardens and sporting grounds remain green and improving the environment.

- **What do you expect of us in relation to water conservation and alternative water supplies now and in the future?**

Please refer to page 77 for further details.

ONGOING PERFORMANCE REPORTING

Performance reporting and engagement is an integral part of ensuring that our programs and activities remain consistent with what customer's value. As part of our submission we will propose an ongoing and transparent performance reporting framework to meet the needs of customers.

- **How should we best inform customers of our performance:**
- **Should we report what actions we undertook to achieve the performance target, what happened that prevented us from achieving the target when we don't meet it, what actions we propose to achieve targets in future years?**
- **What are the channels by which we should report to customers our performance?**
- **What else should we consider?**

Please refer to page 83 for further details.

AREAS OF INFLUENCE

Some aspects of our services are subject to Government and regulatory standards which we are required to comply with, the table below provides some guidance for areas of focus during the Jury process.

AREAS OF FOCUS	OUTCOME	AREAS THAT CANNOT BE INFLUENCED
Water Quality • Performance measures for water quality • The service outcomes and level of investment • When triggered and the rebate amount paid for service failure **Water Pressure** • Performance measures for water pressure • The service outcomes and level of investment • When triggered and the rebate amount paid for service failure	QUALITY WATER SERVICES	• Regulatory and Legislative obligations • The safety of our drinking water is not negotiable • The quality of water at its source (Melbourne Water's accountability)
Call Centre • Performance measures for the call centre • The service outcomes and level of investment • When triggered and amount rebate paid for service failure **Service Interruptions and response** • Duration and number of service interruptions • When triggered and the rebate amount paid for service failure • Level of communication and engagement with customers **Growth** • Who should pay the cost of infrastructure to service new development	RELIABLE AND TIMELY SERVICE	• Location of our call centre • Essential infrastructure maintenance and upgrades to meet regulatory requirements

We need to find a balance between price and service which is fair for everyone.

How should we do this?

AREAS OF FOCUS	OUTCOME	AREAS THAT CANNOT BE INFLUENCED
Supporting Vulnerable Customers · Breadth and depth of support · Performance measures for vulnerable customers **Tariffs and Price Control** · Balance between fixed and variable charges · Changes to tariff structures **Debt Collection** · Our approach to debt collection · The extent to which Guaranteed Service Levels drive our service outcomes (when and how much) · Providing more proactive advice and alerts on customer's water consumption and bills	FAIR FOR ALL CUSTOMERS	· Commission's pricing framework · Government's Environmental Contribution · The cost of bulk water and sewerage services purchased from Melbourne Water (including the desalination plant) · Tariff changes are likely to be subject to agreement with City West Water, South East Water and Government · We will not take debt recovery proceedings, including turning water off, for those customers that cannot afford to pay
Water Conservation · Our approach to water conservation **Alternative Water Supplies** · Approach to the provision of alternative water supply · Increasing access to recycled water **Waterways** · Our approach to waterways management · The management of septic tanks that cannot contain their wastewater on site	CARE AND PROTECTION OF THE ENVIRONMENT	· Meeting Environmental standards · Achieving a 64% reduction in emissions by 2025 · Meeting the environmental policy requirements outlined in 'Water for Victoria' · Aspects of the waterways and drainage management which are responsibility of Melbourne Water and Councils

QUALITY WATER SERVICES

We need to find a balance between price and service which is fair for everyone.
How should we do this?

Through our research, customers have told us that the most important aspect of our service is the delivery of safe, high quality, clean drinking water, and more than one in three customers say that continuous supply of water with good pressure is the single most important feature of our services.

In response to feedback from our customers we are proposing the following objectives:

- Delivering high quality, safe, clean drinking water
- Good water pressure

OBJECTIVE 1: Delivering high quality, safe, clean, drinking water

We supply water to more than 1.8 million people and 760,000 properties through a complex network of reservoirs, pump stations and 9,700 kilometres of pipes. We are the largest retail water utility in Melbourne and in 2015/16, supplied just over 140 billion litres of water to our customers.

To deliver high quality, safe, clean drinking water, we are required to meet all the requirements specified under the *Safe Drinking Water Regulations 2015* which is administered by the Victorian Department of Health and Human Services.

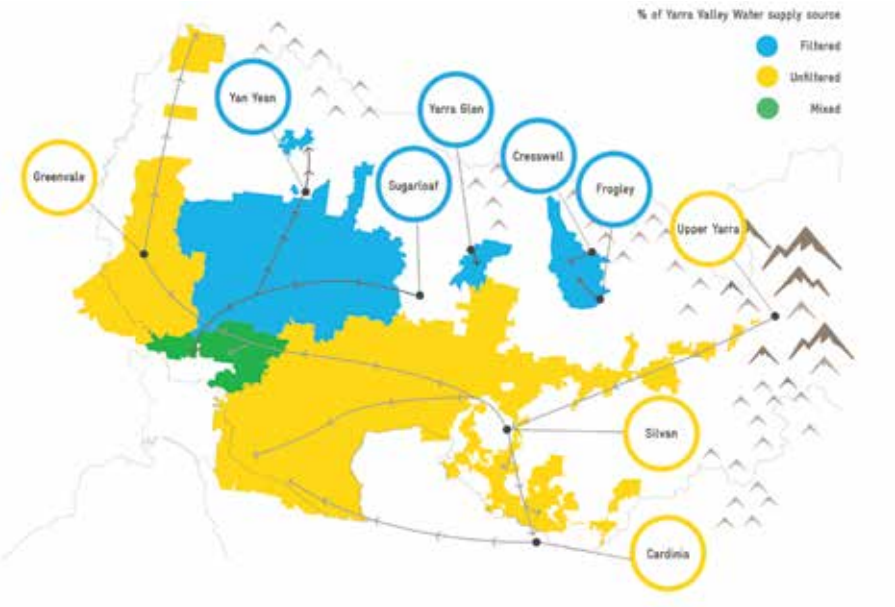
Approximately 70% of our water comes from large protected mountain catchments where no agricultural or human activity is allowed – that is why the water is very high quality and has a low risk of contamination. Water is then stored in large reservoirs for up to four years, where most of the naturally occurring sediments settle out of the water. Water from these protected catchments needs little treatment compared to other developed cities.

The remaining 30% of our water supply comes from catchments where there may be agricultural or human activity. This means the water from these areas requires additional treatment consistent with other developed cities.

A great deal of scientific research has led to the development of guidelines for the use of chemicals in water treatment. To ensure the safety of our water, no matter where it comes from, it is disinfected prior to supply to customers' homes. This process is continuously monitored and controlled to ensure that the disinfection is safe and effective.

As our water is mostly unfiltered, the naturally occurring sediments which do pass into the supply can build up in our pipes over time. During certain events (like water main bursts and high usage periods), these sediments can be stirred up and cause the water to appear discoloured. Although still safe to drink, this causes concern to some customers and so we have significant programs in place to minimise this from happening.

Figure 7: Yarra Valley Water's water supply sources



QUALITY WATER SERVICES

Water quality issues experienced by our customers generally relate to its taste, smell or appearance. We refer to these as aesthetic water quality issues.

OUR APPROACH

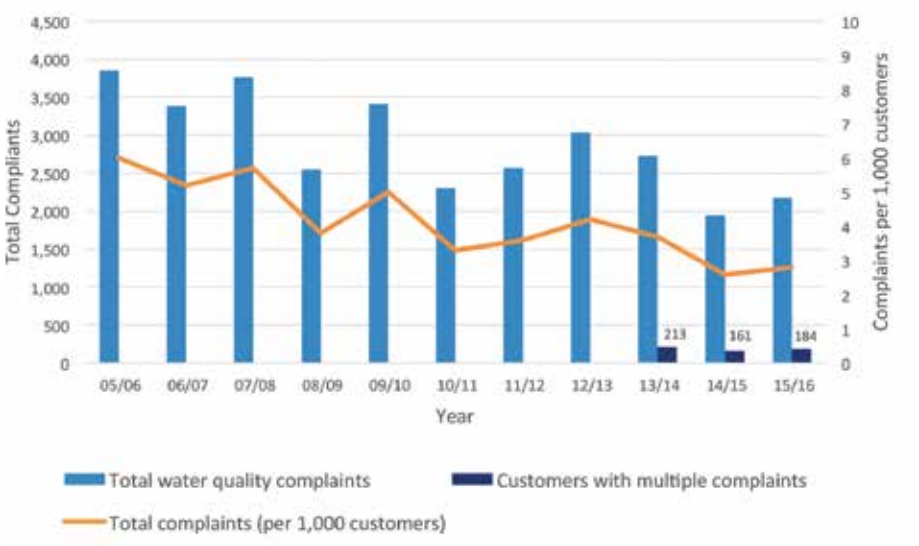
We understand that drinking water quality is, and always will be, a key driver of customer satisfaction, and we are committed to continually improving this aspect of our service.

We have a comprehensive water quality monitoring program to ensure that the water we supply is high quality and pleasant to drink. Every year an independent laboratory collects and tests over 20,000 samples for us at customer taps across our entire network. These results are publicly available on our website, and published in our Drinking Water Quality Annual Report every year.

However sometimes customers may have an issue or concern associated with the water we supply. Our response to preventing and managing water quality issues includes:

- extensive water main cleaning programs to minimise the build-up of sediment in our pipes
- installing devices designed to increase water flow at the ends of our network where we know the water tends to 'sit' in the pipe
- inspection and assessment of the condition of our storage tanks and reservoirs
- dedicated customer management for those customers who experience the same issue more than once over a six-month period. The water quality case manager is responsible for prioritising actions to resolve the issue and keep the customer updated on progress. Cases are only closed when the customer is satisfied

Figure 8: History of drinking water complaints



In 2015/16 we spent:

- $52 million paid to Melbourne Water for harvesting water from streams, protected catchments and filtering and treatment of water
- $500,000 on inspection and maintenance of water supply tanks
- $1.5 million on water mains cleaning programs and water quality monitoring and reporting
- $300,000 for regulatory compliance and standards

OUR PERFORMANCE

In 2015/16, approximately 2,200 customers contacted us about a water quality issue, mostly these related to its colour and taste. 184 customers contacted us more than once about water quality issues during that year. These contacts are counted as 'complaints:' and is the current performance measure.

Other measures:

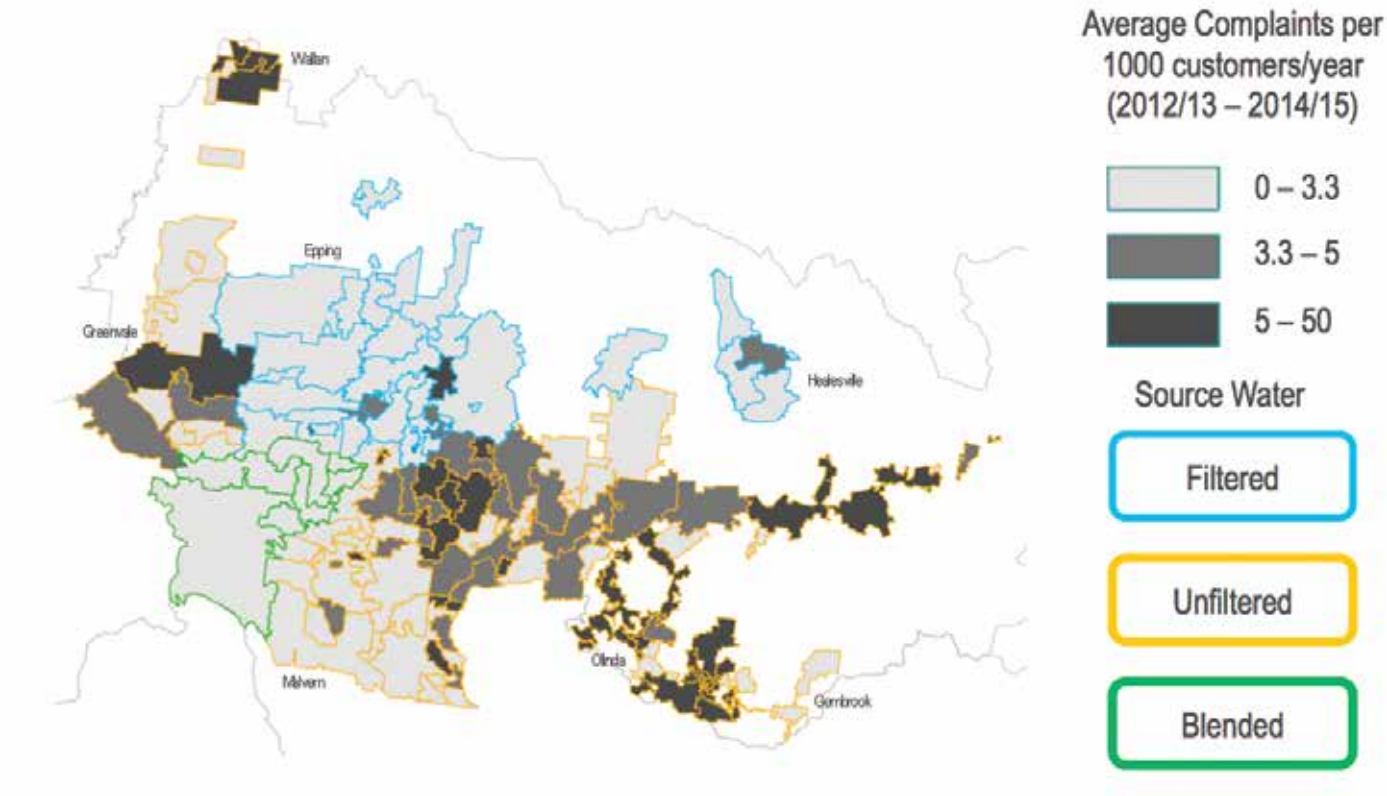
- 93% of customer are satisfied with the overall quality of the drinking water they receive
- 88% of customers drink the water 'straight from the tap'
- Currently there are 54 customers who have water quality issues which are being managed by a case manager
- Historically, we achieve 100% compliance with drinking water quality regulations and standards. In 2015/16, we achieved 100% compliance in 30 of 32 localities except for two days in the Mernda/ Hurstbridge locality and two days in the Warburton locality. In both instances, where compliance was not achieved the water supply was isolated, disinfected, and retested to ensure it was safe before supply has resumed – there were also no reported incidents of illness

THE CHALLENGES WE FACE

While only 0.2% of customers complain about water quality, 7% of our customers are not satisfied with the quality of our drinking water. In addition, 12% of customers say they do not drink our water from the tap – we are currently conducting specific research to better understand the reasons for this. Anecdotally, it also appears that some new arrivals to Australia do not trust tap water as a consequence of the poor quality of the tap water in their home country.

We need to find a balance between price and service which is fair for everyone.
How should we do this?

Figure 9: Water quality issues profiling across our region.

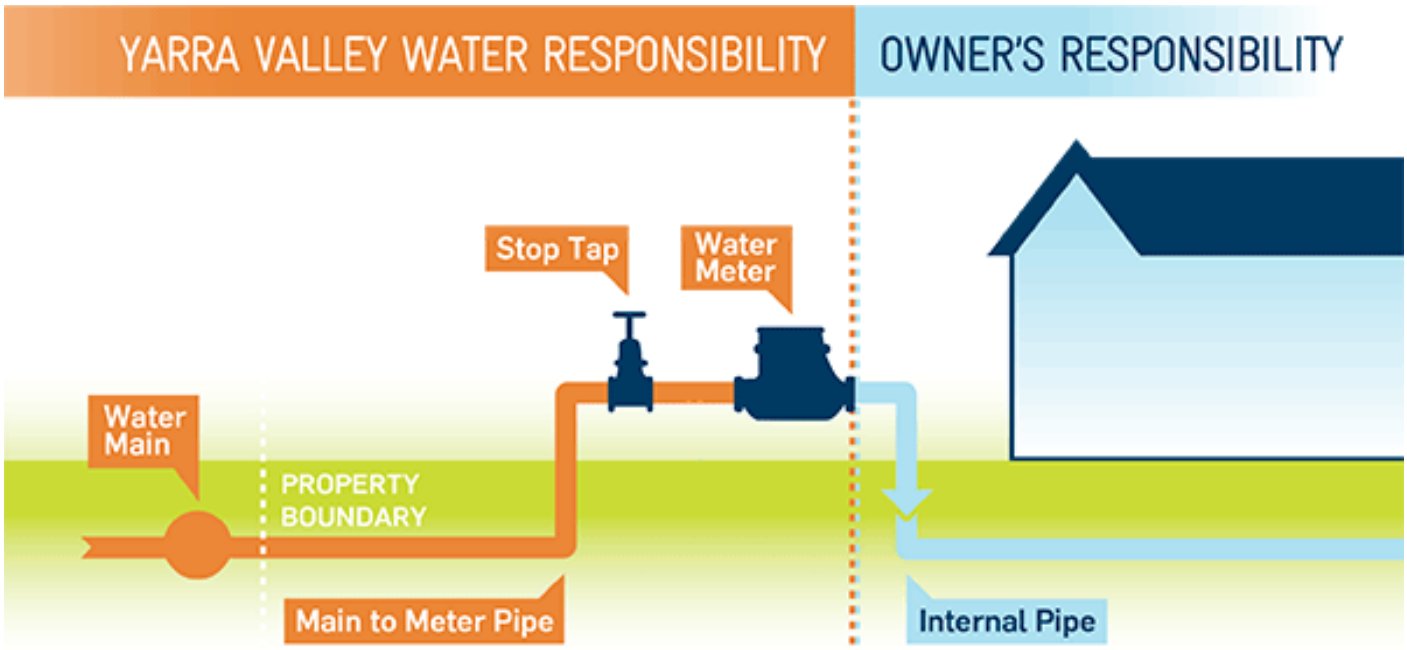


Customers expect that we provide safe clean drinking water. Areas closer to dams have reported more issues with the quality of their drinking water and the options to reduce the instance of complaints can be costly. To decrease complaints by 900 would require additional water main cleaning and maintenance programs. All customers would pay an additional $0.24 each year. A permanent solution would be for the water supply from protected catchments to be filtered at an approximate cost of $75 per customer. In the past this investment has been considered unnecessary given the prevailing quality of water including its safety and the very low level of water quality issues.

QUESTIONS FOR CONSIDERATION

- **What is meaningful to you as a measure of water quality?**
- **To what extent should we promote the health and environmental benefits of drinking tap water compared to bottled water and other beverages?**
- **To what degree should we focus on reducing water quality complaints?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there something else we should do?**

QUALITY
WATER
SERVICES



OBJECTIVE 2: Good water pressure

Our water supply network is designed to deliver a continuous flow of water and good water pressure to homes and businesses. Water pressure and water flow are related. Where water pressure is low, there is usually a low flow of water coming out of the pipe at your tap.

Water pressure varies depending on the elevation of your property as well as the age and type of pipes in your house.

Our Customer Charter outlines our obligation to ensure that we meet minimum flow rates of 20 litres per minute (to typical residential homes) which is measured at the water meter of each property. This is the basis of our water supply network design, construction and operations. If we fail to meet adequate water flow at the customer meter, we provide a one-off rebate of $50.

Pipes inside the property (beyond the water meter) are customers' assets and we are not responsible for issues relating to these pipes.

OUR APPROACH

When we receive an enquiry relating to water pressure, we check to see if the customer may be affected by works that we may be carrying out in the area. If not, we suggest the customer complete a test – that is timing how long it takes to fill a ten-litre bucket at the tap closest to the water meter.

- if it fills in thirty seconds, this indicates the water pressure supplied to the property is adequate and there may be a water pressure issue within the customer's property. Customers are then advised to engage a plumber to determine what is causing the problem
- if it does not fill in thirty seconds, this indicates an issue with the pressure of the water supply coming into the property. We will investigate further and fix the issue

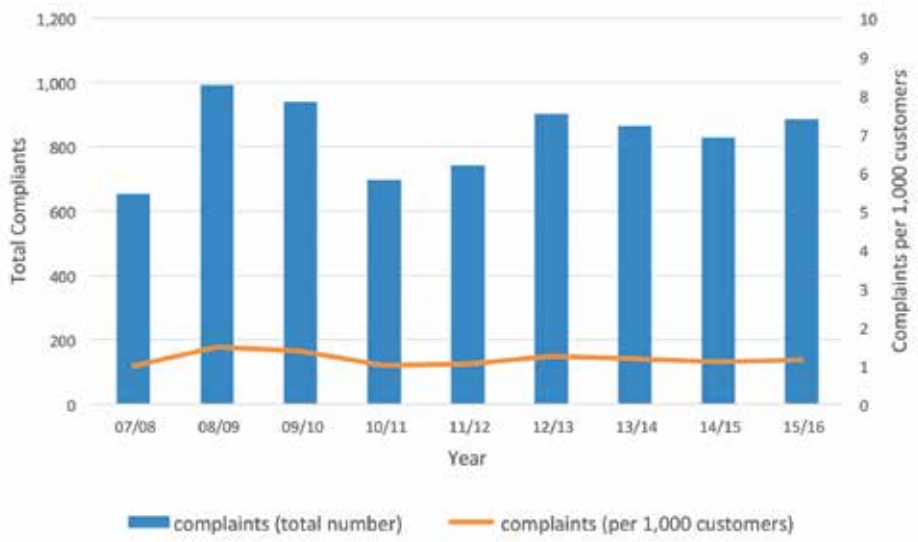
High pressure is a factor in causing pipes to break. In areas in our network where pressure is naturally higher, we proactively manage it through the installation of pressure reducing valves in our network. This reduces the potential for our pipes to break and protects against leaks and breaks in customers' pipes as well.

Low pressure may be experienced in new high density developments, usually due to poor planning during the development phase or internal plumbing design. When we are involved in the planning for a multi-storey development, we will advise the developer to undertake an assessment to ensure adequate pressure and flow to all units and floors within the development. On average, we provide advice to 700 developers each year. We are not usually made aware of smaller developments at the time of planning, design and construction e.g., dual occupancy developments and additional storeys and therefore do not have the opportunity to provide advice.

In 2015/16 we spent $200,000 on managing pressure complaints.

We need to find a balance between price and service which is fair for everyone.
How should we do this?

Figure 10: History of pressure complaints



OUR PERFORMANCE

In the past 12 months, about 900 customers contacted us regarding issues with their water pressure – these contacts are counted as 'complaints,' and is the current performance measure for this aspect of our service.

An alternative would be to measure the number of Guaranteed Service Level payments made to customers for failing to meet the minimum flow standard.

THE CHALLENGES WE FACE

The pressure and flow varies across our network and customer experiences and expectations vary. In most cases where customers complain their expectations are higher than the minimum flow standard.

Often when people move suburb or house and find that the water pressure is lower, they will contact us to express dissatisfaction as the pressure they have come to expect is no longer available. In almost all of these cases, we are still meeting the minimum standards. Nevertheless, we try to identify anything else we might do to assist the customer.

As our responsibility ends at a customer's front tap, customers can be left dissatisfied when the issue on their property is not resolved by us.

QUESTIONS FOR CONSIDERATION

- **How should we best meet customers' expectations of water pressure?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there something else we should do?**

RELIABLE AND TIMELY SERVICE

We need to find a balance between price and service which is fair for everyone.
How should we do this?

Customers understand that their service may be interrupted at times. At the same time, customers tell us that when they have an issue they expect it to be resolved quickly and efficiently.

Our research shows that our customers value the following:

1. Solving issues when they contact us
2. Ensuring wastewater is dealt with effectively
3. Delivering water with minimal interruption
4. Minimising inconvenience caused by interruptions to water and sewerage services
5. A timely response and restoration when water or sewerage services are interrupted
6. Providing services to new customers

OBJECTIVE 1: Solving your issues when you contact us

Customers have a choice about how they contact us – phone, email, via our website, online chat and social media. Despite living in todays connected, 'always-on' digital world, our research indicates that the telephone is still the preferred way to contact us, especially when customers want an immediate response, the enquiry is complex or they want to make a complaint so that they know the issue is being dealt with.

When customers prefer to contact us by email or letter, our commitment is to reply to correspondence within four working days of receiving the letter or 24 hours of receiving an email. Where we fail to do so we pay a $50 rebate.

Customer research shows that resolution of their issue is a key driver of satisfaction for customers. The research also suggests that the time taken to answer the call can be a driver of dissatisfaction, particularly if the customers issue is not resolved.

OUR APPROACH

Our customer contact centre in located in Mitcham has 115 employees responding to over 650,000 telephone calls, 1,100 letters and 24,000 emails each year.

Our contact centre handles bill related enquiries from 8am to 7pm Monday to Friday (excluding public holidays) and our faults and emergency calls are answered 24 hours a day, 365 days a year. The annual cost to run our local contact centre is $8.6 million.

We provide all employees with in-depth training to ensure customers receive the right answer, resolution and service in their first interaction with us, so that they do not have to unnecessarily contact us again about the same issue.

The current measure for performance is the number of calls answered within 30 seconds, however our approach is to prioritise resolving customers' enquiries rather than the speed at which we answer the call. Our call back technology enables customers the choice of not waiting while still holding their place in the queue, we will call them back when they reach the front of the queue.

Our Yarra Valley Online Water service provides customers with the option to manage their account online at a time that suits them the most, including paying bills and other transactions associated with their account, rather than having to call our customer contact centre. Currently we have over 113,000 customers registered and in the past 12 months, 248,500 transactions have been processed online. Together with other process automation and online systems, Yarra Valley Online Water has contributed to an 26% reduction in calls to our customer contact centre.

We have a team of specialists available via a dedicated telephone number to resolve outstanding customer enquiries and complaints. However, if a customer feels we haven't resolved their issue, they can escalate their complaint to the Energy Water Ombudsman Victoria (EWOV), which is an independent and impartial dispute resolution service.

In 2015/16 we spent:

- $8.6 million to operate our contact centre, responding to customer calls, emails and letters
- $ 900,000 to operate a 24 hour fault line
- $3.2 million providing services to commercial and business customers, plumbers, developers and builders
- $500,000 for ongoing customer research and insight programs to understand what customers value, expectations and levels of satisfaction
- $5 million to ensure our customer and asset systems, including our website, support our staff in meeting the customers needs

RELIABLE AND TIMELY SERVICE

OUR PERFORMANCE

In 2015/16, 92% of customers say our contact centre service met or exceeded expectations. Figure 11 identifies the level of satisfaction is strongly correlated to the customer's perception of resolution of their enquiry.

Figure 12 identifies that since 2012/13, a change of focus to resolving the customer's enquiry rather than speed of answer, has resulted in the decrease in the % of calls answered in 30 seconds. Together with the Figure 11, it appears that despite the change in call response times it is not a significant factor in customer satisfaction.

Year to date, we are answering 60% of calls within 30 seconds with the average call length of 7 minutes for account enquiries, 5 minutes for calls to our faults line and 14 minutes for high bill enquiries.

Each year, the Commission engages Customer Service Benchmarking Australia (CSBA) to assess our call centre performance. CSBA mystery shoppers' pose as genuine customers with general enquiries to rate each interaction assessing the customer experience:

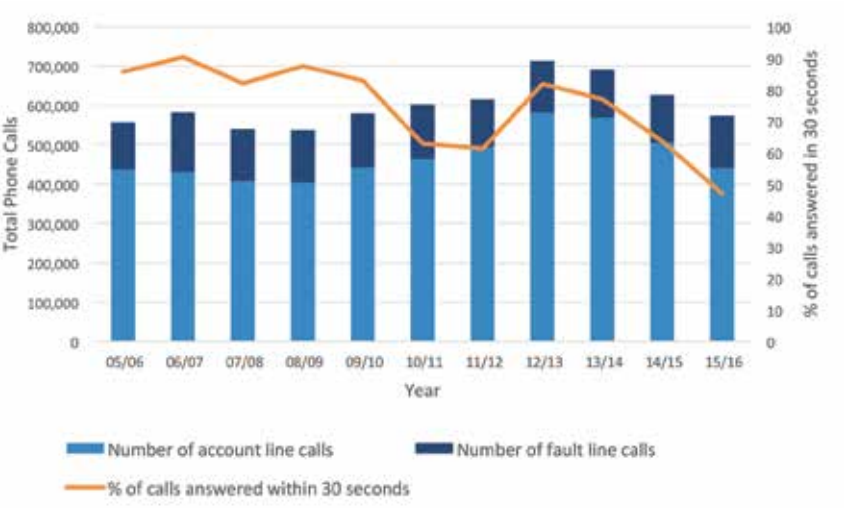
- quality of greeting when answering the phone
- customer service agent's manner
- enquiry handling skills
- time to connect the call

In 2015/16, we were amongst the top performers for customer service agent manner and enquiry handling skills. However, the performance was impacted because 29% of calls were not connected to one of our customer service team within four minutes. The high rate of unsuccessful calls is unprecedented and coincided an extremely busy period caused by hot weather, information technology system upgrades and the changeover to a new maintenance contractor.

Our recent performance is trending back towards normal service levels.

Figure 11: Customer satisfaction with resolution of enquiry

Figure 12: History of phone calls and connection times



We need to find a balance between price and service which is fair for everyone.
How should we do this?

Each month on average we receive 32 referrals from the Energy and Water Ombudsman Victoria. The main issues that generate complaints are billing and debt collection related, accounting for 62% of total referrals. Most complaints are resolved by a single telephone conversation with the customer within three days of the referral from the Ombudsman. Less than 10% of these referrals require further action by the Ombudsman.

THE CHALLENGES WE FACE

Meeting our desired outcome of 'issue resolution' for customers first time is a more time intensive approach. Our employee training and the ongoing development of our employees is now focused on more technical aspects about the water and sewerage network, to enable them to respond appropriately to these more specialised enquiries.

In the past, we have resourced on the speed of answering calls within 30 seconds, the change of approach to 'first call resolution' has resulted in an increase in the time required to answer phone calls.

QUESTIONS FOR CONSIDERATION

- **What is the appropriate balance between 'first call resolution' and answering the phone call within a timely manner?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there anything else we should do?**

OBJECTIVE 2: Ensuring your wastewater is dealt with effectively

Over the last five years, our research shows customers are becoming less tolerant of interruptions to services. Additionally customers have lower acceptance of wastewater service interruptions compared to water service interruptions. When they do occur, they expect the service is fixed and the issue resolved.

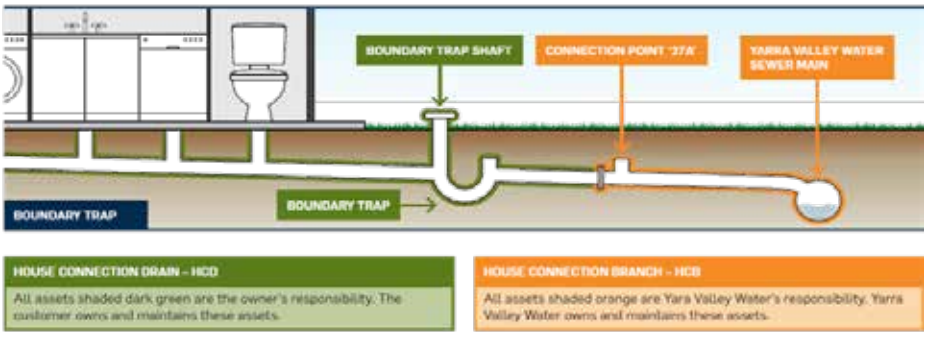
Our customers find talking about their sewerage service more difficult than talking about water. There is an expectation that wastewater is simply taken away and there is relatively little awareness about what happens next. Perhaps it's the "yuck" factor that means that sewerage issues are not often discussed, even though the cost of sewerage comprises 50% of the average bill.

We remove wastewater from households, industry and commercial businesses and transfers it for treatment and disposal. Wastewater from customers' laundries, kitchens and bathrooms, goes through a series of pipes (inside customers' properties – green in Figure 13 below) which are connected to our sewer pipe (orange in Figure 13 below). Customers are responsible for maintaining their pipes and Yarra Valley Water is responsible for maintaining the wider network.

The wastewater then flows through our sewerage network of pipes and pumps to be treated at one of our sewage treatment plants, or at one of the major Melbourne sewage treatment plants (at Werribee or Carrum Downs – managed by Melbourne Water). In 2015/16, 120,550 megalitres (million litres) of wastewater (92%) was treated by Melbourne Water, the remaining 8% was treated at one of our local treatment plants.

Over 1,200 vents are installed in our network to ensure the sewer is ventilated and to enable gases to be released before they smell or cause the sewer pipe to corrode.

Figure 13: Customer & Yarra Valley Water sewerage network



RELIABLE AND TIMELY SERVICE

OUR APPROACH

Sewer pipes are underground, making them more likely to crack or collapse due to ground movement, weather, tree root intrusion and their age depending on the materials that they are made from.

Disruptions to a customer's service can take many forms, such as:

- toilets, sinks or laundries which are slow to drain or do not drain at all
- wastewater spilling onto the ground and or sometimes into customers' properties

These mostly occur due to objects getting stuck inside the sewer pipes, blocking the flow of wastewater.

The most common reasons for blockages are:

- tree roots entering the pipes looking for water – particularly in drier conditions
- structural failure or the collapse of pipes – due to the age and material of the pipe
- fat and grease build up in the pipes from household and commercial kitchens
- other items that should not be 'flushed' down sewers (e.g., wet wipes, rags, sanitary items and nappies)

Most disruptions occur from a blockage in a customer's pipes, the rest are due to blockages inside our pipes or at a connection point.

When a customer contacts us about a blockage, we will ask them to explain what they are experiencing as the location of where the blockage determines who is responsible:

- if there is an irregular flow of wastewater only when household fixtures are in use (toilet, washing machine etc.) the blockage is usually within a customer's pipes, or at the connection point. We will advise the customer to engage a plumber to clear the blockage. If the customer asks for a plumber's details, we can provide them with a referral. If the blockage is at the connection point, we will clear the blockage
- if there is a constant flow of wastewater or a spill, even when the household fixtures (toilet, washing machine etc.) are not in use. This usually means the blockage is in our pipes. We will send a crew out immediately to remove the blockage, and assess further work required to prevent future disruptions occurring. This may include renewing the pipes that are at a high risk of failure (due to age and its condition – e.g., cracks, etc.) and where blockages have previously occurred

If the blockage results in a sewage spill in a customer's house, we aim to contain the spill within one hour. For a spill outside the house but on the customer's property we will aim to contain the spill within four hours. Where it takes longer, the customer will receive a one-off rebate of $1,000. Additionally, we will pay customers a $50 rebate where their service is interrupted for more than four hours, or when they experience more than three interruptions in a year.

When a customer experiences two service interruptions within a 12 month period, a case manager is assigned to investigate the cause of the failure and implement interventions to prevent further interruptions.

Our criteria to put a pipe on our renewals program is driven by customer service levels rather than a financial business case. The priority for renewals on the program is informed by the structural condition of the pipe – using close circuit television (CCTV) inspection together with:

- blockage and repair history within the last five years
- age and material of the pipe and surrounding ground conditions
- potential impact of a spill or asset failure on customers and the environment

When customers call advising they can smell sewage on their property or in their street it can often be hard to identify where the smell is coming from. We know that over 90% of all reported odour issues are related to blockages occurring in the network and we encourage customers to look around to determine whether they have any leaks or spills from their pipes or if the smell is coming from out on the street. If the smell is more noticeable on the customer's property, we will advise the customer to engage a plumber to investigate a blockage. Where the smell is more noticeable in the street, we send a crew to investigate and resolve.

In 2015/16 we spent:

- $30 million renewing sewer pipes
- $5 million improving the system capacity and reliability of the sewerage network
- $10 million for collection and treatment of wastewater at our treatment plants
- $154 million paid to Melbourne Water for the collection, transfer, treatment and disposal of sewage at their treatment plants
- $1.5 million in modeling and planning to optimise the performance of the sewerage network
- $1.3 million managing and monitoring tradewaste products and impacts
- $200,000 for odour control and monitoring programs

We need to find a balance between price and service which is fair for everyone.
How should we do this?

OUR PERFORMANCE

Figure 14 shows the current measure for performance of blockages per kilometre of sewer pipe. There were reductions in the number of blockages following the end of the drought as trees no longer intruded into sewer pipes seeking water. In the last three years there has been a gradual increase in the number of blockages.

Figure 15 shows the number of customers whose service is affected by blockages, including the restoration of service and customers affected by multiple interruptions. There has been a recent decline in the number of blockages resolved with four hours, attributed to the transition to a new maintenance contractor. Since January 2017, 82% of customers affected by blockages have had their issue resolved within four hours.

Figure 16 shows that we typically receive between 100 and 250 complaints per year.

The average number of Guaranteed Service Level rebates paid over the last three years are:

- 1,887 – sewerage service interruption for more than four hours
- 11 – more than three sewerage interruptions in 12 months
- 56 – wastewater spill in the property for more than four hours
- 8 – wastewater spill inside the house for more than one hour

Figure 14: History of sewerage blockages

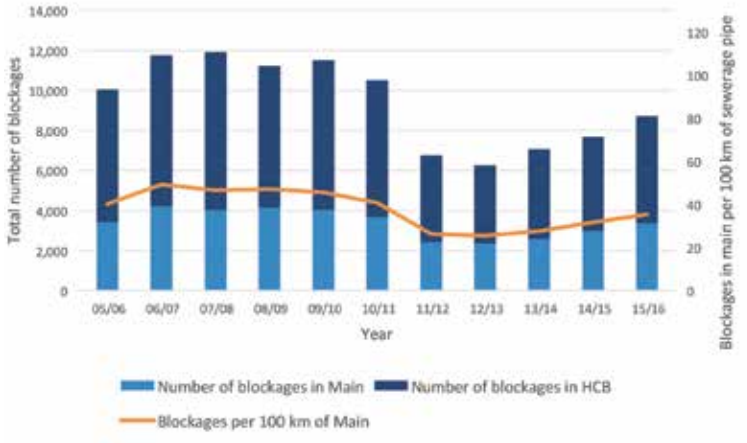


Figure 15: History of customers affected by sewerage interruptions

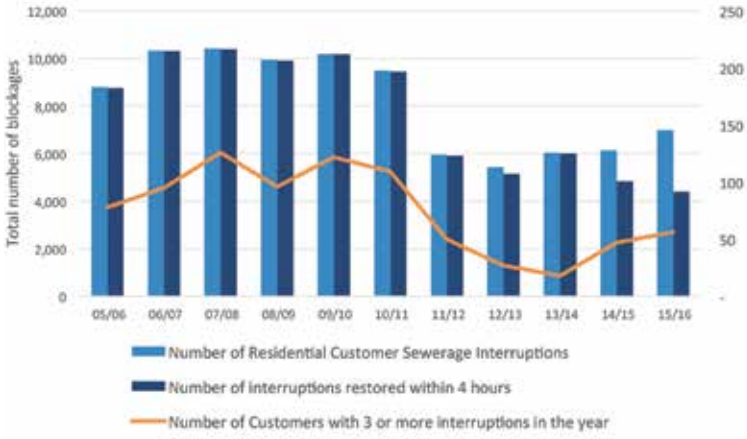
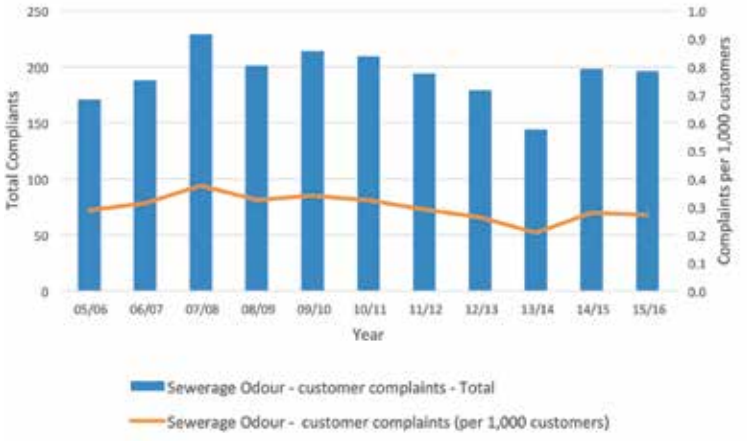


Figure 16: History of sewerage odour complaints



RELIABLE AND TIMELY SERVICE

THE CHALLENGES WE FACE

Customers have told us:

- disruption to the wastewater service is not ideal, but they can understand it can happen from time to time
- repeated disruption to the wastewater service will not be well-received
- customers do not expect to have wastewater spill inside their property
- in relation to wastewater, customers want to 'set and forget' – "We don't want to see it or smell it."

There is not a reliable method available to predict where the first blockage will occur, however we do know that 20% of blockages occur in pipes that have previously blocked. Preventing further blockages in these pipes can provide a significant reduction in disruption, however, this is achieved over an extended period.

Options to improve our performance regarding blockages and interruptions are to increase:

- the amount of sewer pipe renewals each year by changing when a pipe is identified for placement on the renewal program
- education programs to prevent blockages in both customer and our pipes
- proactive cleaning programs

To reduce the number of customers affected by a wastewater service interruption by 1,500 to 6,100, customers would pay an additional $4.40 per year. Conversely ceasing pipe replacements for five years would reduce customer bills by $2.00 and increase the number of customer interruptions in the short term. The rate of interruption would increase significantly in the medium to long term.

Where there are systematic and persistent odour issues, we aim to fix these through the installation of odour treatment facilities which remove the smelly gases from the sewer before being released into the air. Odour treatment can range from simple filters installed on vents to facilities that use chemicals to 'treat' wastewater and remove the smell in the process.

A recent inspection program has identified that a large proportion of our vents need replacing as they are either failing to manage odours or pose a potential safety risk to the community due to their age and condition.

Currently we spend a small amount to maintain and replace sewer vents. We propose to increase our investment for the next regulatory period to $20 million to replace vents and $6 million in corrosion works.

QUESTIONS FOR CONSIDERATION

- **Q** **To what extent should we increase expenditure, if at all, to decrease the number of repeat interruptions, reduce odour complaints and community safety risks?**
- **Q** **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Q** **Is there something else we should do?**

OBJECTIVE 3: Delivering water with minimal interruption

Our drinking water supply network is designed to deliver a continuous supply of drinking water to customers' homes.

Customer service may be interrupted by:

- an unexpected event (unplanned) such as a water main burst due to the age and condition of the pipe – caused by:
  - broken pipes
  - changes in water pressure
  - ground movement due to changes in weather
  - accidents especially associated with above ground water hydrants
- a planned maintenance activity such as a water main renewal or, water main cleaning and inspection

OUR APPROACH

The water mains renewal program is also driven by customer service levels rather than a financial business case. We prioritise replacement of pipes that have caused multiple interruptions over a 12 and 24 month period. The program aims to replace pipes before they cause repeated interruptions. Some types of pipes constructed from the 1940s through to the 1960s are replaced after a smaller number of failures as they are approaching their end of their life and are more prone to rapid decline. For other pipes in the network the pipe condition is generally good other than a couple of weak spots. Water mains cost us $300 per metre to replace.

We need to find a balance between price and service which is fair for everyone.

How should we do this?

Large pipes, called distribution mains, are also targeted for renewal. We aim to replace these pipes before they start to fail because of the significant community impacts if they were to fail e.g., a larger number of customers without a water supply or major local community disruption in a busy traffic area.

The replacement of large pipes takes a long time to plan for due to the greater impact on customer outages, local communities and environment, traffic, and cost. We use failure data and the age of the pipes to assess the likelihood of a pipe failing. We then assess the consequence of the pipe failing and the likely environmental and customer impacts including the safety of the public and our maintenance crews and prioritise the work accordingly. The replacement of large (distribution) mains usually takes two to three years, depending on the size and location of the pipe and cost around $2,000 per metre to replace.

The water network is separated using valves to limit the number of customers that are impacted by an interruption – this is known as a shut off block. We aim to minimise the number of customers impacted when we turn the water off by limiting each shut off block of 25 properties.

Figure 17 depicts the number of customers impacted by a water burst event – where:

- light blue lines show the location of water pipes with red circles showing valves that can be operated to turn off water supply
- the customers experiencing an interruption (i.e. their water is off) are inside the dark green area (shut off block)
- the customers within the light green area (extended shut off block) will continue to receive water from multiple directions, however, they are likely to experience lower water flow compared to normal

Figure 17: Customers impacted by a burst event

We will automatically pay a customer a rebate of $50 where:

- we do not provide at least three days notice of a scheduled maintenance activity that will result in an interruption to water supply
- the scheduled interruption occurs in peak times (5am to 9am or 5pm to 11pm) or
- the water supply is lost for longer that five hours

In addition for a burst or leak that causes a water supply interruption, a $50 rebate is paid where the water supply is lost for more than four hour.

Where a customer experiences more than five interruptions to any of their services in a year, $50 will be paid for the sixth and each subsequent interruption.

In 2015/16 we spent:

- $23 million renewing and replacing water pipes
- $8 million improving the reliability of the water supply network assets
- $7 million scheduled maintenance activities
- $1.5 million in modelling and planning to optimise the performance of the water supply network

RELIABLE AND TIMELY SERVICE

OUR PERFORMANCE

We measure our performance at a network and individual customer level. Figure 18 shows that the number of unplanned interruptions typically is between 5,000 and 6,000. The number of customers affected by an interruption steadily increased between 2008/09 and 2013/14. The recent improvement is associated with additional valves that reduce the number of customer impacted by a burst.

Figure 19 shows a steady decrease in the proportion of customers with multiple water interruptions, most significant is the reduction in customers with greater than two interruptions.

The average number of Guaranteed Service Level rebates paid over the last three years are:

- 1,830 – planned water supply interruption for more than five hours
- 430 – planned water supply interruption in peak hours
- 14,704 – unplanned water supply interruption for more than four hours
- 828 – five or more unplanned service (water and wastewater) interruptions in 12 months

THE CHALLENGES WE FACE

Customers have indicated they accept that water supply can be interrupted from time to time. They expect that they will not have repeat issues following the repair and are concerned if there is a recurrence of the problem.

We know that with the increasing age of our water network and the impact of climate change, including more severe weather events, and increased density of urban areas we are expecting to have to increase our expenditure to maintain existing service levels in the medium and long term.

Due to the many different causes of interruptions, there is little relationship between the timing and likelihood of the first and second burst. However, after the second burst, there is a much greater likelihood of further bursts.

Figure 18: History of water supply interruptions

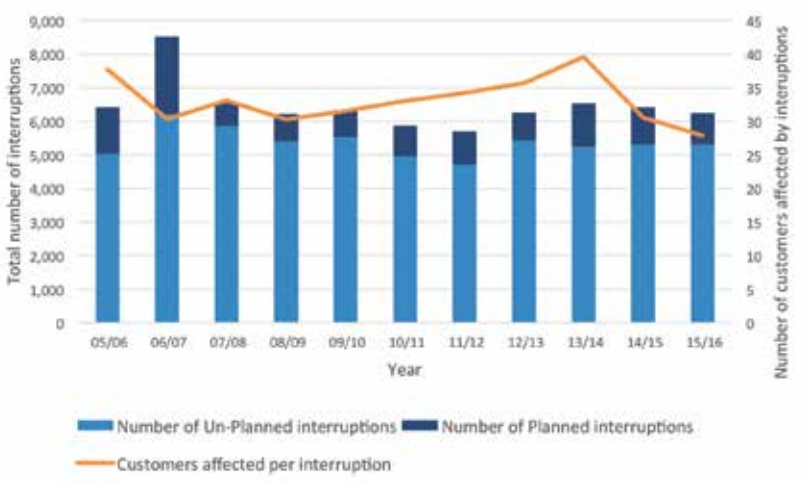
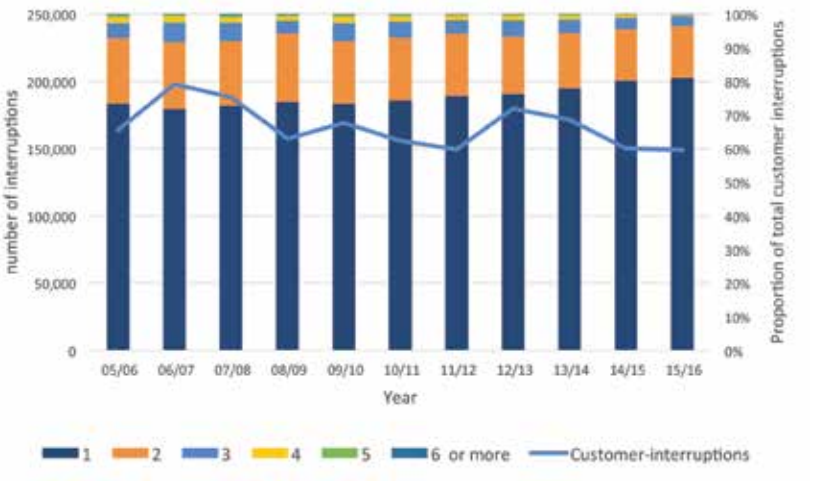


Figure 19: History of customers experiencing multiple unplanned interruptions



Options to improve our performance regarding interruptions are:

- increase the amount of water pipes renewed each year by changing when a pipe is identified to be put on the renewal program
- increase the valve insertion program to reduce the size of shut off blocks
- reduction of water pressure in the network

To reduce the number of customers who experience more than one water supply interruption in a year by 4,000 to 15,500, we would significantly increase our pipe replacement and maintenance programs. Customer bills would as a result increase by $9.40. Conversely suspending our replacement program will result in a small increase in customers affected in the short term, however the impact will significantly increase overtime. Customer bills would reduce by $2.70.

We need to find a balance between price and service which is fair for everyone.
How should we do this?

QUESTIONS FOR CONSIDERATION

- **To what extent should we increase expenditure, if at all, to decrease the number of repeat interruptions that customers experience?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there something else we should do?**

OBJECTIVE 4: Minimising inconvenience caused by interruptions to your water and sewerage services

Customers expect us to conduct works in a way which minimises the inconvenience they experience.

There are several ways that we try to reduce the inconvenience caused by our works, including the days and times that we conduct works, coordinating works with other authorities, the provision of alternative water supplies and communication to keep customers informed so they know what's going on, when the issue will be resolved and can plan their lives around the works.

OUR APPROACH

Customers may experience interruption to service caused by unexpected events such as water main bursts and sewerage blockages – these are unplanned events. Customers may be affected by scheduled maintenance activities that prevent future blockages. These are known as planned interruptions.

Planned water and sewerage service interruptions

The times and days on which we can conduct planned works is with a view to minimising customer inconvenience. We advise customers at least three working days before works begin that their water supply will be turned off, including the time and how long we expect it to be off.

Before a project starts:

- customers will receive a letter in the mailbox a few days before we start work.
- in some cases, we will install a temporary water supply above ground, via a blue hose and ramps will be placed over them to allow vehicles to drive over these hoses

During the project:

- there will be a supply of water available during the interruption if required
- customers can experience noise during the project which will usually be restricted to normal working hours
- there may be new pipes, building materials (such as gravel), a storage container and work trucks in the street
- traffic control may be in place
- there are likely to be holes in the nature strip, securely covered with boards so we know where other services like gas, electricity and phone are in the ground, so our workers are safe and other services aren't disrupted
- at the same time, we may also replace or move fire hydrants in the street to provide better access for firefighting services or make the system work more efficiently for them

After the work has been completed:

- before leaving the site we do surface restoration work, called a reinstatement. Grassed areas such as nature strips are tidied up, top soil is spread over the area and new grass seed is sown.
- hard surfaces such as concrete and asphalt are usually reinstated within two weeks of completion of the work

For planned interruptions, we will pay a $50 price rebate if:

- we cut off the water supply for more than five hours
- we fail to give at least three business days' notice of planned water interruptions
- the interruption is longer than we said it would be
- we cut off the water supply between 5am and 9am and/or 5pm and 11pm

Unplanned water and sewerage service interruptions

When a customer reports a fault, we will provide an indication, based on the severity, location and the number of people directly or indirectly impacted, of when we will respond to the problem. Low priority jobs that occur on the weekend may be delayed until Monday when there are a greater number of crews available.

Our customers have told us how they expect to be kept in the loop during an interruption. They expect to be notified:

- when our crew is going to arrive
- when the work is finished and the service is back online (e.g., water is on again)
- about next steps, or additional actions (such as any restoration works)

During the works, customers can get updates by contacting our 'faults line' or via an interactive faults map on our website. The map provides real time information about customer reported faults in our service area that we are attending to and working on.

Sewer and water plumbing reimbursements and insurance claims

Sometimes a customer's property is damaged because of a burst water main or overflowing sewer. We have a policy to reimburse out of pocket expenses following a fault of our asset. In addition, we assist the customer by:

- engaging professional cleaners to clean and disinfect spills inside a property
- cleaning up wastewater and restoration of outdoor areas
- providing advice and information about contacting insurance companies

RELIABLE AND TIMELY SERVICE

- support for the customers going through the insurance process, giving advice on whether their policy covers the damage or not
- support for the customers going through the insurance process, giving advice on whether their policy covers the damage or not
- reimbursing the customer's insurance excess when they make a claim following damage caused by our asset fault
- assisting with alternate accommodation if needed
- covering uninsured loss where a residential customer doesn't have insurance

Customer Call Backs

Customer "call-backs" are made to customers who have reported a fault, when the issue has been fixed. Customer call-backs allow us to:

- check in with the customer to ensure that they are satisfied with the work done
- identify problems with the work and getting them quickly addressed
- provide customers with helpful information on our faults process, including the timeframes for any follow up work to be undertaken, the insurance claim process and reimbursement claim process
- support customers with unresolved complaints or repeat service issues

We currently spend $100,000 each year to call customers who have reported a fault.

OUR PERFORMANCE

In the past 12-months, 66% of sites were returned to normal within 30 days after repairs were completed.

We provide call backs to around 30% of customers that have reported issues to us and each week, approximately 500 call backs are made.

THE CHALLENGES WE FACE

Our customer research shows that customers would value additional information and support during a service interruption. To meet customers' expectations a considerable investment in new information technology systems would be required at an estimated cost of $9 million over five years ($1.50 per customer). The proposed system would allow customers, based on their individual needs and preferences, access to real time information, including SMS notifications, about the progress of works.

Often the workers resolving the problem are focused on getting the job done, so communication to households affected may be compromised. An option for real time customer engagement particularly for larger problems could involve a small investment (at a rate of $0.30 per customer) to fund mobile teams of customer service officers to communicate directly with customers at their properties about the status of works and address any concerns.

Our customer research has identified that some customers are dissatisfied with the time required to fully restore nature strips affected by works by planting seed. An option is available to use instant turf rather than seed at a cost of $1.20 across all customer bills.

QUESTIONS FOR CONSIDERATION

- **Q** **To what extent should we increase expenditure, if at all, to improve our ability to proactively communicate to customers during an interruption to their water or sewerage service?**
- **Q** **Do you support increased expenditure to better meet customers' expectations regarding site (e.g., nature strip) restoration?**
- **Q** **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Q** **Is there something else we should do?**

We need to find a balance between price and service which is fair for everyone.
How should we do this?

OBJECTIVE 5: A timely response and restoration when water or sewerage services are interrupted

A customer may experience an unexpected interruption in either their water or sewerage service. Customers tell us that when an interruption happens they would be 'delighted' if we started work to fix the issue within one hour of becoming aware of the problem.

We rely on our customers and others to tell us when there is a fault in our water and sewer network. We have a maintenance contractor who responds to all unplanned water and sewerage service interruptions.

OUR APPROACH

All service interruptions reported to us, are recorded in our central system and prioritised according to severity, location and the number of people impacted by each incident. The customer will be advised of an expected 'attendance' time for the fault.

In some cases, we will send an assessor to the location to see what the severity of the fault is and to prioritise and plan repairs. If the fault is a significant burst, they may turn the water off immediately or reduce the water flow to reduce water loss and as a result some customers will experience lower pressure than normal until the repair is completed. The assessor may mark the area with a stake or tape to indicate the location to the crew, and to let the local community know that we are aware of the problem and will be returning to fix it.

We currently aim to respond to a reported fault within one hour in the following scenarios:

- a major burst resulting in excessive water loss, safety hazards, extensive property damage or major traffic disruption on main roads
- loss of water supply to premises
- wastewater spilling inside a property or into drains, creeks or waterways
- reports of blocked sewer pipes

For water supply interruptions, we may need to turn off the water to affected homes so that we can repair the pipe. We pay a rebate of $50 if water supply is not turned on within four hours.

For sewerage supply interruptions, we may ask customers to stop flushing toilets, running taps or using their washing machine. If we fail to restore service within four hours we pay affected customers a $50 rebate.

Water interruptions are classified for our response and reported to the Commission as follows:

- Priority 1 – a burst or leak which causes, or has the potential to cause, substantial damage to customers property, water quality or flow rate or to the environment
- Priority 2 – a burst or leak which causes, or has the potential to cause, minor damage to customers property, water quality or flow rate or to the environment
- Priority 3 – a burst or leak which is causing no discernible impacts on customers, property or the environment

Additionally, sewerage interruptions are categorised as:

- Priority 1 – a wastewater spill that involves or results in any of the following:
  - a public health concern
  - significant damage to property
  - a discharge to a sensitive receiving environment
  - a discharge from a sewer pipe that is 300 millimetres diameter or greater or
  - the flow is greater than 80 litres per minute
- Priority 2 – any minor failure to contain wastewater within the sewerage system and any spill affecting several users which results in minor property damage or results in a surcharge outside a building which does not pose a health risk

In 2015/16 we spent:

- $11 million repairing burst and leaks
- $5.2 million clearing blockages
- $3 million case managing incidents and issues
- $ 4 million repairing assets such as manholes, hydrants and meters
- $6 million in maintaining a field workforce including depots, vehicles and machinery

OUR PERFORMANCE

We measure our performance by using response and restoration times. In relation to bursts and leaks, Figure 20 (on page 50) shows that from 2005/06 to 2014/15 there has been no significant variance or trends in response and restoration times, particularly for priority one and two jobs. We have not included 2015/16 performance in the historical trend data as there was a temporary reduction in service levels due to a transition to a new maintenance contractor. Performance in 2017 is now recovering.

RELIABLE AND TIMELY SERVICE

In relation to blockages, Figure 21 shows an improvement in restoration times from 2005/06 to 2013/14. We have also not included 2015/16 performance data and similar to burst and leaks performance is recovering.

In relation to sewage spills, historically since 2005/06:

- between 7 and 24 customers have had a sewage spill inside their house
- on average 53% of cases each year are responded to in one hour, and ranges between 22% to 93%
- 100% of priority one spills and more than 92% of priority two spills have been contained within five hours each year

Figure 20: History of restoration times for burst and leaks

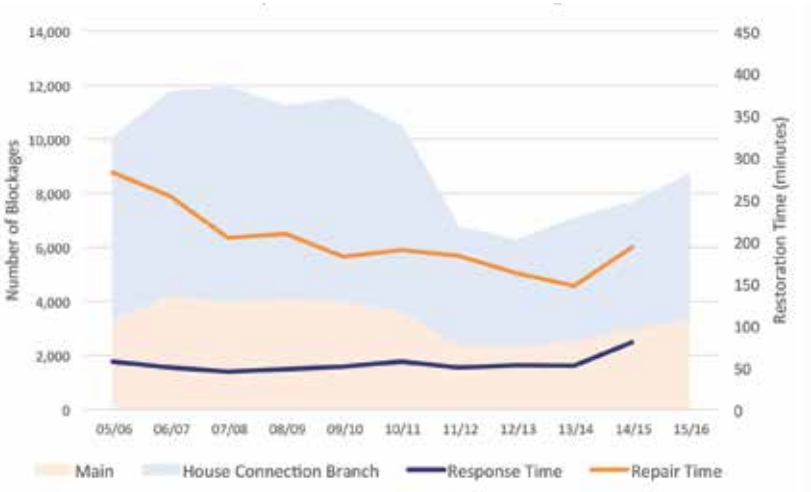
THE CHALLENGES WE FACE

The Millennium drought emphasised water as a precious resource, and customers believe it is important not to waste it. Historically, customers have expressed dissatisfaction when they see us not responding quickly enough to bursts and leaks from our pipes.

For unplanned interruptions, population growth, with its impact on traffic congestion, means that we will need more crews available to maintain the existing level of service for response times. In addition, our community expect that all interruptions where there is a visible loss of water be fixed quickly.

Increasing the number of maintenance crews available to respond to service interruptions, would increase by 10% the number of low priority interruptions being responded to within two hours at a customer bill impact of $13. Conversely, reducing or reprioritising crews would decrease the number of mid to low priority interruptions responded to in two hours. Customers bills would reduce by $3.40.

Figure 21: History of restoration times for blockages



QUESTIONS FOR CONSIDERATION

- **Given the recent decline in the timely response to service interruptions, we propose that for our Price Submission we commit to the average performance levels for the periods not affected by the transition to the new contractor. Do you agree?**
- **To what extent should we either reprioritise or increase expenditure, to meet customer expectations where there is a visible loss of water?**
- **Is there an unacceptable level of service that we should pay a customer rebate, if so how much?**
- **Is there something else we should do?**

We need to find a balance between price and service which is fair for everyone.
How should we do this?

OBJECTIVE 6: Providing services to new customers

There are two types of growth that occurs – "Greenfields" and "Infill".

Greenfields growth typically occurs on the outskirts of Melbourne. This usually involves turning paddocks into suburbs, hence the phrase greenfields.

Infill is growth which occurs in already established suburbs which makes them more densely populated.

According to *Plan Melbourne Refresh*, 70% of this growth will be in infill areas such as the La Trobe and Monash national employment clusters and multi-unit redevelopments, and 30% in green fields development like the northern growth area. Roughly 13,000 new properties are connected each year.

The cost of building assets for this growth is recovered through a combination of upfront contributions paid by developers and the ongoing water and sewerage service charges paid by new customers.

OUR APPROACH

Servicing Greenfields Growth

Since the expansion of the Urban Growth Boundary in 2010 we have been planning, designing and building water and sewerage infrastructure to accommodate an extra 120,000 properties in Melbourne's north. This is roughly equivalent to adding the population of Canberra to our service area.

To plan for this growth, we work with various planning bodies and developers to predict how many properties will be created in each area, and when they will be built. We also forecast on average how much water and wastewater demand will be placed on the system for each property. Using this data, we have worked with stakeholders to develop the Northern Growth Corridor Integrated Water Management Plan (IWMP) to best service the area.

The key components of the servicing strategy are;

- implementation of recycled water supply in the corridor, via a third pipe network
- a large sewer to collect the wastewater and transfer it to the metropolitan sewerage system
- a new wastewater treatment and recycled water treatment plant which will produce recycled water back to the local community. This water can be used to water gardens, wash clothes and flush toilets
- a new storage and pumping facility in Craigieburn which will process the excess wastewater above the amount needed to meet the recycled water demands for the area
- a new large sewer running through Epping to transfer this wastewater to the existing network so it can be treated at the Western Treatment Plant in Werribee. We are also assessing the feasibility of harvesting stormwater flows for drinking water supply to provide higher levels of stormwater management to protect the upper reaches of the waterways

While we construct large assets, there are many assets constructed by developers on our behalf.

In 2015/16 we invested approximately $118 million in new infrastructure, of which $16 million of these works were delivered as developer constructed assets.

Reticulation pipes, the small pipes that customers directly connect to, are built and funded by the developer. These are then gifted to us upon completion, and we are then responsible for all ongoing and eventual replacement.

Servicing Infill Growth

In 'Infill' areas there is already a working network in place.

In many instances the existing network can accommodate the additional growth. Developments are usually on a smaller scale than greenfield developments. Commercial developers generally build the high-density developments and subdivisions of a block are undertaken by builders or mum and dad investors.

For infill development, our greatest challenge is space. As the area is already established there is often a lot of existing underground utility services, such as gas etc. Finding space between them all to either upsize our existing assets or install new ones can be difficult. Also, the land above ground is usually already being used for a road or footpath, so minimising interruptions to the local community is another key consideration. The effect of these two challenges is that working in infill areas can be very expensive but we do recover these costs either through new customers or developer contributions.

OUR PERFORMANCE

Since 2005/06, we have connected an additional 123,000 customers (19% increase) and constructed about 1,000 kilometres of both water and sewer pipes. Household density has increased from 71 customers per kilometre of water main to 76 customers, at the same time household size is smaller.

RELIABLE AND TIMELY SERVICE

THE CHALLENGES WE FACE

The housing development industry is influenced by broader market forces and therefore the rate of progress can vary. In greenfield developments, finding the balance between ensuring infrastructure is in place to service development and not having assets in the ground before they are required is a constant challenge. Depending on the size and complexity of the asset, it can take between one and five years to fully design and construct major infrastructure.

For infill development, each development has its own set of unique opportunities and challenges. We take an integrated planning approach when assessing the options for providing water and sewer services in infill areas. The optimum solution is tailored to suit the local conditions and considers the costs and wider benefits of a development to the community, environment and customers. The installation of recycled water infrastructure is often not the cheapest solution but the community values the benefits of reducing demand on drinking water supplies. The La Trobe NEC case study on the far right is an example of the challenges associated within infill development.

CASE STUDY: PROPERTY DEVELOPMENT OPPORTUNITY IN IVANHOE

Occasionally, our existing assets and the land they are on, are no longer needed. When we sell them, we seek to maximise the value of the land for the benefit of all customers. Money from the sale of land is passed on to our customers through lower prices. Sometimes, we have issues selling the land that the local community considers a public asset. Councils and their constituents often expect the land to be gifted for ongoing public use, however this would mean we are giving away assets owned by all customers which would otherwise generate a return that lowers our costs and customers' prices. Government policy also requires that surplus land is disposed of on commercial terms.

We own a 0.73 hectare piece of land at Upper Heidelberg Road in Ivanhoe which is zoned Public Use Zone 1 and can only be used for public utility purposes. The site contains a large disused water tank and there are several large-scale apartment complexes planned in the surrounding area.

We are partnering with the State Government Agency Places Victoria to rezone this land and obtain a planning permit so that the land can be developed, through a process where the local community are involved throughout the design and planning process. The increase in value of the land will be shared equally with Places Victoria.

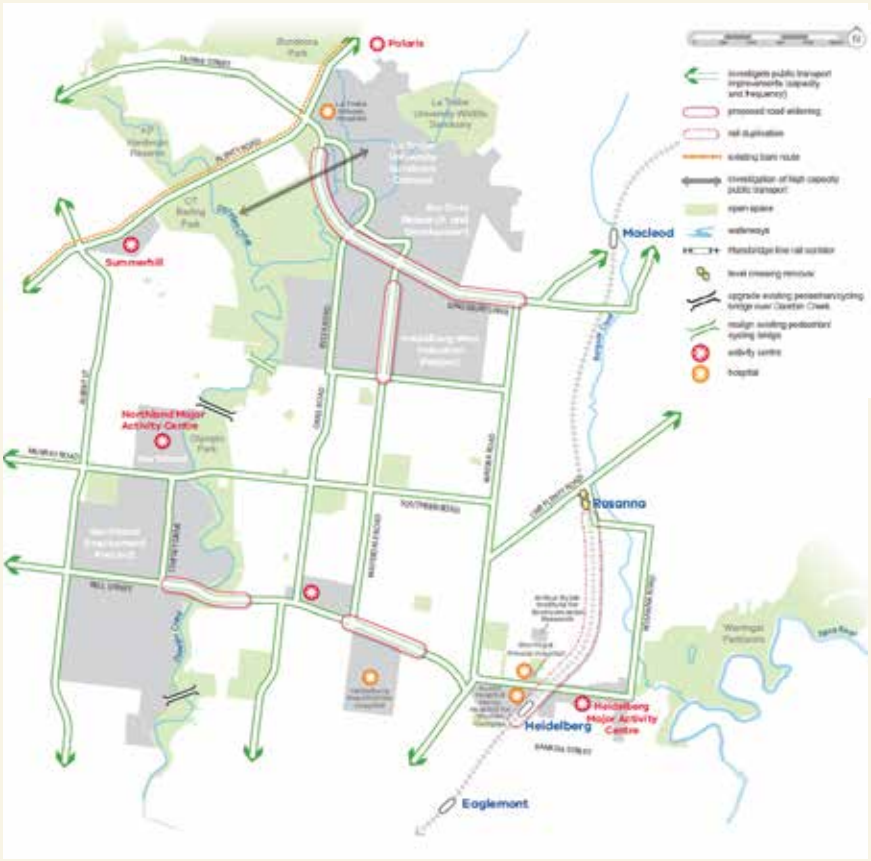
Development is expected to be completed by 2023.

QUESTIONS FOR CONSIDERATION

Q **Under what circumstances should we consider developing land to maximise value for our customers?**

We need to find a balance between price and service which is fair for everyone.
How should we do this?

CASE STUDY: DELIVERY OF RECYCLED WATER TO LA TROBE PRECINCT



The La Trobe National Employment Cluster (NEC) is an example of a place-based approach to planning water services which could include recycled water. La Trobe NEC covers just over 20 square kilometres of land, sitting between seven and 14 kilometres from the Melbourne CBD. The La Trobe NEC is situated across the Banyule and Darebin municipalities where there is a broad range of socio-economic diversity. The population is forecast to grow from 36,000 residents to approximately 100,000 by 2050. The number of jobs in the precinct is forecast to grow from 26,000 jobs to 90,000 jobs. Major employers in the area include La Trobe University, Northland Shopping Centre and the Austin Hospital.

Typically, within infill developments, the growth in customer base can be accommodated within the existing network or with minimal additional expenditure on new infrastructure. In this instance the overall cost per customer across the customer base will reduce.

We have considered two servicing options for the La Trobe NEC. The traditional servicing approach to provide only drinking water and sewerage services would require only minor upgrades to the existing water supply network. However, due to constraints on wet weather sewerage capacity, some major sewerage system upgrades would be needed. The cost of this approach is $43 million.

When the development is complete the combination of developer charges ($1,354 per property) and the additional water and sewerage charges from the new customers, would mean that prices for existing customers would be $20 lower than they would have been otherwise, as we are able to recover our costs over a greater number of customers.

An alternative approach is to provide recycled water. It is estimated that at full development the scheme would produce approximately 1.5 gigalitres (billion litres) a year of recycled water. The estimated cost to build this infrastructure is $216 million which would equate to an approximate price decrease across our customer base of $10 compared to the reduction of $20 with a traditional servicing approach, noting that developer charges would include an additional $677 per property for recycled water services.

To ensure that customers are not worse off from the La Trobe NEC development by being serviced with recycled water, we would have to increase the developer charges by $11,400 or increase the ongoing recycled water charges to those customers by $565 per annum. A 2014 study into recycled water schemes found that properties with recycled water increase in value by between $4,200 to $5,200.

QUESTIONS FOR CONSIDERATION

Q **Should the La Trobe NEC Development include recycled water, if so, to what extent should the additional costs be paid for by developers, La Trobe NEC customers and all customers?**


SAY HELLO
TO LITTLE
BILL

FAIR FOR ALL CUSTOMERS

We need to find a balance between price and service which is fair for everyone.
How should we do this?

Water is recognised as an essential service and customers tell us that all customers should have access to water and wastewater services regardless of their ability to pay. Nevertheless, we should not charge higher income customers more for the services we provide.

Customers' expectations of our service are often determined by reference to their experiences with other service providers. There is a general expectation that all customers will receive the same level of service. Where services are not the same, there is an expectation that it will be addressed.

OBJECTIVE 1: Charging customers fairly

For each price submission, we engage with customers to explore opportunities for the way we charge.

Customers and stakeholders have raised some concerns about the way we currently charge customers. In considering any changes, it is worth noting recent research and experience, which tells us price reform is difficult as customers:

- tend to take a personal perspective – "will I be better or be worse off?"
- are more sensitive to bill impacts than ever before – therefore to minimise any adverse impacts, reforms will need to take a long-term view
- have inherently different preferences, circumstances and water use
- perceive as fair what currently exists and perceive any change as unfair with some level of mistrust, expressing a concern of monopolistic behaviour and profiteering as the motivator for reform
- given the overall cost base does not change, a variation to price structures will result in winners and losers amongst customers

OUR APPROACH

There are different pricing structures and charges for residential customers and business customers the charges for 2016/17 are:

	CHARGE	APPLIED	PRICE
Residential			
Water – Fixed	System charge	per year (paid quarterly)	$174.65
Water – Variable	Step 1 usage (usage between 0 and 440 litres per day	per kilolitre used (metered)	$2.60
	Step 2 usage (usage between 440 and 880 litres per day)	per kilolitre used (metered)	$3.06
	Step 3 usage (usage over 880 litres per day)	per kilolitre used (metered)	$4.55
Sewerage – Fixed	System charge	per year (paid quarterly)	$351.53
Sewerage – Variable	Sewage disposal charge	per kilolitre discharged (calculated on metered water usage)	$2.03
Business			
Water – Fixed	System charge	per year (paid quarterly)	$283.49
Water – Variable	All usage	per kilolitre used (metered)	$2.81
Sewerage – Fixed	System charge	per year (paid quarterly)	$547.08
Sewerage – Variable	Sewage disposal charge	per kilolitre discharged (calculated on metered water usage)	$1.99

FAIR FOR ALL CUSTOMERS

When a property is leased the tenant and landlord share the costs of water and sewerage services. The landlord pays the fixed charges. Tenants pay the variable charges only for water and sewerage services they use.

11,000 customers receive recycled water to their homes and businesses, and pay a fixed and variable charge.

Since 2014, residential customers who receive a bill that includes water variable charges have received $100 off their bill issued between July and September. The Government's Water Rebate is funded by efficiencies achieved by ourselves and the wholesale supplier, Melbourne Water. The rebate is scheduled to end in 2017. Prices from 2018 will be reduced to pass on the efficiencies instead of an annual rebate.

The customer's bill also includes parks and waterways charges billed on behalf of Parks Victoria and Melbourne Water.

7,000 business customers also pay trade waste charges. Trade waste is wastewater produced from the operations of industry and commercial businesses. It may contain chemicals, metals, high organic loads, fats, greases and detergents.

In 2015/16 we spent:

- $1.5 million for economic regulation by the Essential Services Commission and pricing activities
- $2.5 million to read customers meters
- $4.5 million in producing customers bills

We need to find a balance between price and service which is fair for everyone.
How should we do this?

OUR PERFORMANCE

95% of our revenue is received from core water, sewerage and trade waste charges, including:

Figure 22: Revenue receive by customer segment

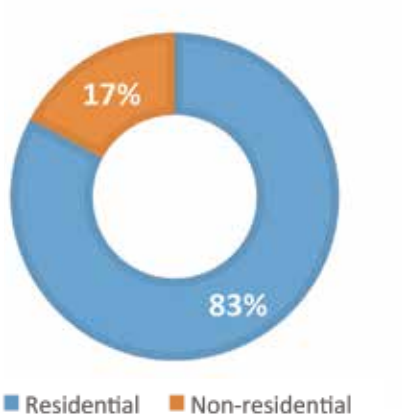


Figure 23: Proportion of revenue from fixed and variable charges

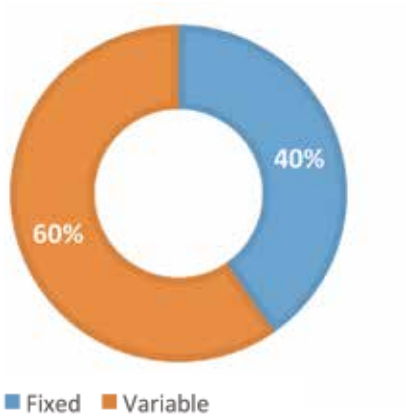
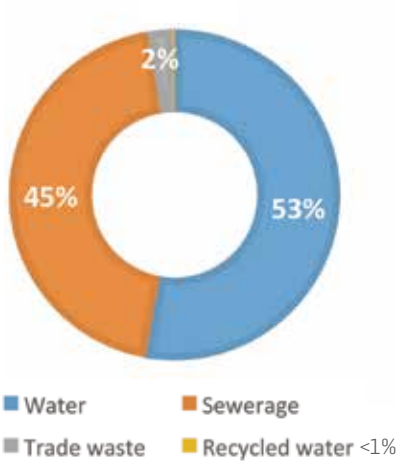


Figure 24: Proportion of revenue by product category



The composition of various residential customer bills in 2016/17 include:

TARIFF	SMALL HOUSEHOLD (110 KILOLITRES)	TYPICAL CUSTOMER (155 KILOLITRES)	TENANT (155 KILOLITRES)	LARGE USER (300 KILOLITRES)	SMALL BUSINESS (240 KILOLITRES)
Water system charge	$175	$175	–	$175	$283
Step 1 variable charge	$286	$383	$383	$417	
Step 2 variable charge	–	$23	$23	$388	$673
Step 3 variable charge	–	–	–	$56	
Sewerage system charge	$352	$352	–	$352	$547
Sewage disposal charge	$163	$229	$229	$444	$429
Trade waste contract charge	–	–	–	–	$61
Total less $100 rebate	-$100	-$100	-$100	-$100	–
Total Water and Sewerage Bill	**$875**	**$1,062**	**$535**	**$1,732**	**$1,993**
Waterways charge[2]	$97	$97	–	$97	$117
Parks charge[3]	$74	$74	–	$74	$74
Total bill	**$1,046**	**$1,233**	**$535**	**$1,903**	**$2,184**

2 The waterways charge is billed quarterly on behalf of Melbourne Water for drainage services.
3 The parks charge is billed annually in the July – September account on behalf of Park Victoria.

FAIR FOR ALL CUSTOMERS

THE CHALLENGES WE FACE

In 2012, for our 2013 price submission, we undertook extensive customer research in conjunction with the other water utilities in Melbourne which, in part, assessed customers' attitudes to potential changes in tariffs. Included in the research were the following four options:

- reduction in the number of steps in the variable water charges
- changes in the way we charge for wastewater disposal
- applying fixed charges based on occupancy rather than title
- introducing an optional 100% volumetric charge

The research concluded that there was little support for pricing reform.

In the Commission's guidance paper for the 2018 water price review they recognised the water utilities are best placed to consider the interests of their customers in designing tariffs. However, their guidance did also contain their preferences for tariffs including:

- tariff structures should be simple, understandable, cost reflective and enable customers to respond to price signals
- consider a single fixed charge for sewerage, incorporating the sewage disposal charge into the sewerage fixed charge
- have transition strategies to manage the impact of price shocks on materially affected customers (the Commission consider price changes of more than 10% per year as material)
- show how the interests of customers, particularly low income and vulnerable customers, have been taken into account

At each price submission, we re-engage with customers to explore opportunities for the way we charge. Some customers and stakeholders have suggested the following option for pricing reform.

- increasing the volumetric proportion of the customer's bill (currently 60%) to encourage water conservation, together with a corresponding reduction in the fixed charge
- fixed charge with free water allowance, where customers would be charged for water used over their allowance like many mobile phone plans
- fixed charges based on meter size – larger meter incurs higher service charges
- reduce the recycled water charges (approximately 80% of the step 1 volumetric price) to further encourage the use of recycled water and reduce demand on drinking water
- vary prices based on where customers live and the cost to deliver services to the location
- per capita water use threshold for large households, where the volume allowance in step 1 is based on number of people in a household particularly those that are vulnerable
- a social tariff, to provide immediate relief to hardship customers then gradually increase their payments over a number of years as their financial capacity improves. Example - discounting each bill by 50% in the first year, declining the discount by 10% each year until year 6 when customers will pay the full bill

It is worth noting the following constraints regarding pricing reform – any change:

- must result in the same revenue being collected e.g., a reduction in fixed charges will result in an increase in variable charges
- will produce winners and losers. It is important to have strategies in place for managing the impacts to adversely affected customers
- will need to consider the impacts of different customer segments particularly those in financially or socially vulnerable circumstances
- will need to be discussed and agreed with South East Water, City West Water and the Department of Environment, Land, Water and Planning as there is a desire to maintain common tariff structures across metropolitan Melbourne, although not necessarily prices

QUESTIONS FOR CONSIDERATION

- **Q** **Which if any price reform options are worth pursuing?**
- **Q** **Are there other options that should be investigated?**
- **Q** **What is an acceptable increase in a customer's bill due to price reform?**
- **Q** **How could we mitigate against the risks to those negatively impacted by changes?**

We need to find a balance between price and service which is fair for everyone.
How should we do this?

OBJECTIVE 2: Sharing Risk Through Prices

Prices and the method in which prices are adjusted each year are established at the commencement of each regulatory period (every five years).

Common forms of price control in use are:

- **Individual price caps** — the most commonly used form of price control where prices are changed annually by applying the CPI$^{+}_{-}$X formula to each price component. Prices are not rebalanced within the regulatory period
- **Revenue cap** — the maximum revenue businesses can earn is set at the start of a regulatory period. Prices are adjusted annually to reflect over or under recovery of revenue from the previous year
- **Weighted average price cap (or price basket)** — changes in prices for individual products may vary, usually derived from the actual quantities of the service sold. The overall weighted average must conform to a predetermined price path (CPI$^{+}_{-}$X)
- **Weighted average revenue (or revenue yield)** — the average revenue per unit of service earned by the business is capped in any period. The average is calculated by dividing total revenue by total output

OUR APPROACH

As part of our 2012 customer research 841 participants gave their views on moving from a price cap approach to a revenue cap approach. The results indicated that the large majority of customers were likely to support the revenue cap and in 2013 we proposed to implement a revenue cap and this was approved by the Commission.

We use a revenue cap form of price control that ensures we have sufficient revenue to cover our costs but also prevents us making excess revenue.

We receive about 60% of our revenue through variable charges and thus the level of demand is by far the biggest influence on the revenue we receive. If our customers use more water than forecast, we receive additional revenue but we also pay our wholesaler (Melbourne Water) more for increased volume of water.

Recognising that changes in demand impact both revenue and costs, we use net revenue which is the revenue we receive from fixed and variable charges less the amount we pay Melbourne Water for the services they provide.

If we collect more net revenue than we require, all of the excess revenue is returned to customers in the following year via reduced prices. If we collect less revenue than we require, we collect the shortfall from customers over subsequent years' subject to a constraint of a price rise of no more than 2% (plus inflation) each year due to a revenue cap adjustment. This means excesses are returned as soon as possible and shortfalls are recovered gradually if required to avoid price shocks.

OUR PERFORMANCE

In 2013/14 we received $6 million in excess revenue due to increased customer demand. In 2014/15 our prices were reduced to return this money to customers. In 2015/16 prices were not increased to return another $6 million. In 2016/17 prices were again reduced to return $7 million.

THE CHALLENGES WE FACE

The Commission has advised that for the 2017 price submission, a new rating system will be used to rate a company's submission. The higher a rating, the higher a return on equity is allowed in setting prices. For Yarra Valley Water, moving from a "Standard" to an "Advanced" submission would mean a 0.4% increase in the return on equity resulting in $8 million in revenue.

If we were to propose an advanced submission, we would need to demonstrate:

- our customer consultation approach is robust and how we have taken on board suggestions
- our commitment to efficiencies that will result in savings of more than $10 million by providing the same services for less or greater services for the same

In addition we could change our revenue cap to only return excess revenue and not increase prices when there is a shortfall

QUESTIONS FOR CONSIDERATION

Q **What is an appropriate form of price control?**

Q **If we retain a revenue cap:**

- **is the current constraint of a 2% annual price rise reasonable?**
- **should the elements included in the revenue cap be expanded?**

Q **Our revenue requirement is set for the duration of the regulatory period with prices adjusted on an annual basis. What factors or situations should we consider in an annual adjustment to prices?**

FAIR FOR ALL CUSTOMERS

OBJECTIVE 3: Assist customers to avoid higher bills

With Melbourne's population set to almost double within 50 years and scientists forecasting more extreme droughts, the water utilities in Melbourne are working together to find new ways to improve our water network and ensure it operates even more efficiently. More near real time customer water consumption information will help the utilities better plan infrastructure maintenance and upgrades.

Our existing mechanical meters haven't changed much since the 1940s, but now we're considering upgrading to digital water meters. This technology will help detect leaks and even alert customers if their home or business has a hidden leak.

Because it's digital, it will enable greater access to near real time information that will help customers have more control of their water use and bill, rather than waiting for three months to get their quarterly account.

Access to more timely water consumption information will help us respond to water interruptions and better plan infrastructure maintenance and replacements.

We are working with the other water utilities in Melbourne to determine if it is the right time to start moving towards digital metering. Our objective is that digital metering will be implemented if there is no price impact on customers and there is customer support.

Our customer research for digital meters, comprising focus groups and online surveys of 2,800 customers has found:

- Melburnians are extremely proud of their water and the majority don't need to proactively interact with their utility. However only one in five customers are okay with the amount of contact or information they currently receive.
- awareness of digital meters is growing with half of customers saying they know a little or more about digital metering, up 7% from six months ago
- 69% of customers support digital metering after they have been informed about it
- over 85% agree they would be happy to have digital meters installed but only if there were no upfront costs and no increased ongoing costs. Customers are mainly concerned that digital metering will mean more costs for them
- benefits customers expect from digital metering include increased operational efficiency for the water utility, leak alerts and increased bill certainty

Currently, customers often contact us after receiving an unexpected 'high bill' (8% of all calls to our Contact Centre).

They say that we should be able to warn them of an impending high bill and prevent the experience of 'bill shock.' Often customers will liken their expectation to their broadband or mobile phone experiences.

Our customers tell us that they would highly value real-time advice regarding water usage. They would particularly like to be alerted when usage is higher than normal and prior to receiving a high bill so they can modify water use and/or investigate unexplained usage.

OUR APPROACH

We bill water and sewerage charges quarterly based on a meter read.

Each quarter we read over 760,000 meters to enable us to bill water and sewer usage charges. The reads are undertaken manually by a team of meter readers who walk the streets and collect the required information from each property. In some cases, a lack of access to meters results in an inability to read the meters and results in either the customer having to contact us with their meter read or the bill being calculated using estimated usage.

Customer reading cards are left at properties where we can't obtain a meter read, asking customers to call in a meter read or lodge their meter read via our website. We also send an SMS to customers who do not respond to the card requesting a read. We have about a 20% response rate from customers.

When a customer contacts us to discuss an unexpected high bill, consultants are trained to help the customer to identify the source of increased water use, this can include:

- higher than normal garden watering or irrigation
- extra people in the house
- new appliances or pool use
- change of seasons
- incorrect meter reading
- becoming a home owner for the first time.

Sometimes however a high bill is found to be associated with an undetected water leak in the property. Once the leak is resolved, the customer may be eligible for a reduction in their usage charges and may result in a substantial reduction in the bill. The allowance can only be claimed once in a five-year period. This encourages customers to fix the leak and to be more proactive in the future.

We need to find a balance between price and service which is fair for everyone.
How should we do this?

OUR PERFORMANCE

Each quarter, approximately 3% of meters are unable to be read.

In 2015/16 we billed a total of $585.2 million in usage charges, we also granted bill reductions to 11,800 customers totalling $3.1 million due to undetected water leaks.

In 2015/16, 15.4 billion litres, or 6,160 Olympic-sized pools, of water was lost through bursts and leaks in the network. Even though this is efficient compared to the water industry nationally and internationally, this is a key area for improvement.

THE CHALLENGES WE FACE

Melburnians expect their utilities to continually find efficiencies to better manage water supply, now and in the future. By finding new ways to save water we can defer future large capital investments in new water supplies such as another desalination plant.

Our existing meter fleet is not capable of providing real time information. We are reliant on manual meter reads on a quarterly basis to calculate and bill customers – at which time we advise customers of high usage. This results in:

- a lack of detailed, timely information to help customers understand and control their water consumption
- a lack of detailed information about peak demand usage to assist in planning and coordinating infrastructure investments efficiently and avoid oversized and therefore costlier assets
- an inability for customers to detect and repair leaks in a timely fashion resulting in unexpectedly high bills, the utilities providing millions of dollars in leak allowances every year and billions of litres of wasted water
- an inability to meet growing customer expectations for transparency, accuracy and availability of information

Digital meters also enable more flexibility in how frequently customers are billed. Most customers are currently billed quarterly, however digital metering could enable customers to pay their actual bill, rather than estimated bill, monthly, allowing households to smooth out their annual costs.

Digital technology generally is providing customers with more information than ever before and customer expectations are increasingly focused on convenience of interactions and transparency of billing. Today's customer expects access to more information, and to be able to access it where and when they want in order to make more informed choices about their lives.

As previously mentioned, our objective is that digital metering will be implemented if there is a positive case for customers and there is customer support.

The economic modelling undertaken indicates that a small upfront cost with ongoing benefits would flow to the customer. We are therefore investigating the options for aligning timing of costs and benefits in the coming years.

It is not expected that a final business case will be completed until after we have lodged our price submission in September. At this stage, we believe that any roll out of digital metering would not commence until approximately 2019/20 at the earliest and would take a number of years to complete potentially with a number of ongoing trials to be undertaken first. The Commission's framework recognises that there are circumstances where water utilities may be uncertain about the timing, cost or even need for large items of capital expenditure. In those circumstances, like digital metering, the Commission has advised:

- include sufficient expenditure to cover only the development costs of the project, with efficient actual construction costs incurred during the period to be rolled into the asset base at the end of the period, along with any accumulated interest
- identify the project as a possible 'uncertain and unforeseen event which would enable a price pass through to customers during the regulatory period when rollout commences.'

QUESTIONS FOR CONSIDERATION

- **What value do you believe that digital metering will deliver to customers?**
- **Under what circumstances would you support the implementation of digital metering in this price submission period?**
- **Is there anything else we should consider?**

FAIR FOR ALL CUSTOMERS

OBJECTIVE 4: Providing accessible services and helping customers having difficulty paying their bill

We have standard billing and debt collection activities for customers which include:

- reading the customer's water meter,
- raising and sending of an initial account,
- managing a range of payment options and channels
- subsequent accounts and actions to collect unpaid amounts.

For most customers, this works well, however some customers do have difficulty paying their bills. Some customers want to pay their bill but simply can't, either because of lack of money, or the ability to meet specific timelines, as a result they are defined as being in 'hardship'. Financial vulnerability is associated with customers at risk of tipping into hardship.

Vulnerability and hardship is not just an issue for long-term welfare recipients, it affects people from all walks of life. Getting help to those in need is challenging as it requires a deep and personalised understanding of individuals and their circumstances. There is no "one size fits all" solution.

Research undertaken by the Victorian water industry indicates that:

- almost 50% said that they have sometimes or always struggle to pay their utility bill in the last 12 months
- 43% regularly pay their bill using some form of credit including borrowing from family or payday lenders, because they didn't have funds available
- 10% indicated that they are currently in serious financial hardship and are unable to pay their bills
- family violence can increase the complexity of financial hardship and can have multi-generational repercussions

Some factors that impact customers' ability to access support include:

- lack of awareness – 66% of customers do not know support services are available. This can be due to language or cultural issues, however there is also a general lack of understanding of support services to help customers experiencing financial difficulties
- embarrassment or mistrust – 41% of individuals experiencing financial vulnerability are too ashamed to ask for help
- lack of early identification – identifying vulnerable people early is the key to stopping them falling into financial hardship. Early identification can be very difficult – often individuals don't self-identify due to embarrassment or a lack of awareness of services, and organisations may not have the tools to identify those at risk
- siloed services – although 21% of customers indicate they have arranged a payment plan with an individual utility provider, rarely is assistance sought from all providers. Additionally, organisations can not share information about vulnerable customers, which creates an additional barrier to early identification

We have industry leading programs to support vulnerable customers, concentrating on early identification and intervention for those experiencing financial difficulty. Using expert internal employees, leading edge tools and connecting with existing support networks we want our customers to know we are here to help and that direct access support is available for those in need.

We service a diverse community and some customers face barriers that prevent them from fully participating in the community. We have identified customer segments for which there are barriers to our services or experience greater instances of financial vulnerability and hardship. These segments include:

- Culturally and Linguistically Diverse (CALD)
- Aboriginal and Torres Strait Islander people
- customers experiencing social and mental health issues
- elderly customers

While there may be some initial higher costs to service these customers, we have found that if we better understand the barriers for our customers and then target our communications and support programs to address these, the long-term cost impact on our business and our bill is reduced.

OUR APPROACH

Debt Collection

We produce 3.7 million bills each year. Our debt collection process commences when a bill is calculated and issued to the customer and is detailed on the following page.

TIMELINES OF OUR DEBT COLLECTION PROCESS

DAY 1 BILL IS ISSUED	Customers have 21 days from bill issue to pay their invoice.
DAY 28 BILL IS OVERDUE	If bill is unpaid after allowing an additional 7 days for payment processing. A final notice is sent to the customers.
DAY 38 SMS PAYMENT REMINDER	10 days after the final notice is issued and where no payment is received following the Final Notice
DAY 43 REFERRED TO DEBT COLLECTION MERCANTILE AGENCY: LEVEL 1	5 days' post SMS (or 15 days' post final notice) the account is referred to Mercantile Debt Collection Level 1. Customers can arrange to pay off the debt. The consultants are trained to identify financial hardship and refer to our WaterCare Team.
DAY 78 REFERRED TO DEBT COLLECTION MERCANTILE AGENCY: LEVEL 2	Referred to Mercantile Debt Collection Level 2 for a more serious debt collection conversation. Customers can arrange to pay off the debt. The consultants are trained to identify financial hardship and refer to the WaterCare Team.
AFTER DAY 78 NOTICE OF PRIOR RESTRICTION	If account total exceeds $800 a letter warning that failure to arrange payment will lead to water supply restriction. The notice is delivered by registered post. This activity is still aimed at engaging with customers to understand their situation.
RESTRICTION OF WATER SUPPLY	Two weeks post notice and the customer has not made contact, the account is referred for restriction to 2 litres/minute at the front tap. On the day, the field officer again attempts to prevent restriction by contacting the customer. Water supply is restored where; hardship is identified, payment plan agreed or in summer in bushfire prone areas.
LEGAL STATUS	Where an account can't be restricted we commence legal proceedings.

FAIR FOR ALL CUSTOMERS

2015/16 we spent $7.3 million on providing multiple bill payment options and debt collect activities. In addition we wrote off $4.5 million of uncollectable debt (0.5% of water and wastewater revenues).

We will pay a $300 rebate to any customer where we commence legal action or take steps to restrict water supply without taking reasonable steps to contact the customer and provide support information and help for those experiencing financial difficulty.

Customers who are unable to afford their water bill

For customers identified as vulnerable or in hardship, we provide various tools to help them better manage their accounts, aimed at supporting the customer and driving behavioural change, including:

- Case Management where customers have a single point of contact
- Specialised payment plans individualised to suit the customer's needs
- CareRing – Counselling support and access to a holistic support network
- Utility Relief Grants from the Department of Health and Human Services
- Water Audits to ensure water efficiency
- Medical Allowances to support customers who have medical conditions that causes higher water usage, e.g., dialysis patients

Our WaterCare vulnerability program is an early intervention program. We work with community groups and have cross referral programs with other organisations. $2 million funding to develop the program was made available in the 2013 price submission process to enhance existing hardship policies, expand programs, adopt best practice and improve associated infrastructure. The funds were not for direct financial customer assistance and the Commission reports regularly on how the additional money has been spent.

The program has been independently audited twice and confirmed as a positive business model.

CASE STUDY: MIGRANT SUPPORT SERVICES

A pilot project was undertaken by one of the Victorian water utilities and AMES migrant support services to determine the effectiveness of education to new migrants to improve their understanding and access to water services.

As newly arrived migrants and refugees, the process to settle and adjust to their new lives takes a significant amount of time. AMES Australia focuses on equipping the participants with basic life-skills and to build their self-confidence and ability to independently access support services in the future.

The aim of the project is to provide tailored and valuable information to the mutual participants in their first language about water consumption, water efficiency and the services that the water business offers to vulnerable people within the region.

After the completion of the targeted pilot there was a substantial increase in the participants' awareness and likelihood to change behaviours and access support earlier. This reduces the risk of higher debts for the customers and higher costs to the business. Some of the insights included:

Water savings:

- a 40% increase in their intention to always or often have shorter showers (4 min)
- significant increase of 31% of participants plan to always or often use the half-flush function on their toilets.
- 28% increase in their intention to always or often wash with a full load of laundry

Trust for drinking water:

- increase of 22% in participant's intention to never or sometimes buy bottled water
- an overall increase of 26% in participants reporting to always or often drink tap water

Assistance with financial difficulties:

- increase in their comfort to not only understand their own water bills, but to also assist a friend with their bills
- significant increase of 31% in participants plan to always or often contact the water business directly for help with bills

- Hardship customer support team costs to serve customers – $1,820,201 per annum
- Hardship customer support team benefit – $6,568,759

The net financial benefit of this program is $4,748,558 each year and does not include other benefits to the customer.

We need to find a balance between price and service which is fair for everyone.
How should we do this?

Our Culturally and Linguistically Diverse (CALD) customer segment represents a growing group. According to Australian Bureau of Statistics (ABS):

- 28% of Victorians were born in more than 200 different countries, within our service area this number is well over 30%
- 23% of Victorians speak a language other than English at home. For most of these people English is not their first language and for others their ability to speaking English is very limited

We continually review our approach to Culturally and Linguistically Diverse programs and this includes working closely with relevant community organisations and Culturally and Linguistically Diverse representatives. As well as language differences, there are many cultural differences that can impact water use. We have gained insight into cultural differences affecting water use, water literacy and paying bills and we use these insights when communicating and engaging with Culturally and Linguistically Diverse customers.

We have significantly expanded our Languages Other Than English (LOTE) program and now have over ten multilingual consultants in our Customer Contact Centre. Every year, these consultants handle over 10,000 calls in Mandarin, Arabic, Greek and Cantonese. Our online self-service platform is also delivered in these four languages.

We also communicate with the Culturally and Linguistically Diverse community through specialised media outlets and produce materials in multiple languages. Within our WaterCare Hub, which provides support to customers and the community sector, we have created a self-sufficient environment for Culturally and Linguistically Diverse support organisations and customers to access support information in 20 languages.

OUR PERFORMANCE

Debt collection performance

In general, each year:

- 80% of customers pay prior to a final notice being issued.
- a further 16% pay after the final notice is issued before being referred to the Level 1 debt collection mercantile agency
- of the customers referred to our debt collection mercantile agency approximately:
  - 80% pay prior to any further escalation of debt collection activity – 140,000 customers enter Level 1 debt collection
  - approximately 40% of the debt that is referred is recovered – 30,000 customers enter Level 2 debt collection
- 8,500 notice prior to restriction registered post letters are sent
  - On average 40% of customers pay or make an arrangement upon receipt of the letter
  - Approximately 5,100 accounts then progress to restriction activity, with a field visit. 60% of these are resolved following the field visit
  - The remaining 2,000 properties have their water supply restricted annually
  - Noting that restriction of supply is a last resort and we do not restrict the supply of any customer struggling to pay their bill
- in 2015/16, where a property had water supply restricted, 49% had service restored within three days with 35% of restrictions still in place after 14 days
- in 2015/16, 172 customers were pursued with legal action

When the customer is no longer at the property, we are unable to make contact with the customer and the debt is greater than 180 days old, the debt is written off as a bad debt. We write off approximately $4 million per annum of bad debts. This is related to tenant debt. Owner debt is not written off as this is classified as a property based charge and any outstanding debt is settled when ownership changes.

Customers who are unable to afford their water bill

In June 2016, we had 7,025 customers with specialised payment plans – representing a 34% increase from 2012/13. Of these 5,689 customers were new to the program – a 78% increase from 2012/13.

Since launching in 2013, the $2 million investment in WaterCare has had a measurable impact on the lives of vulnerable customers, including:

- 120% increase in the number of customers accessing government Utility Relief Grants
- 168% increase in the number of customers transitioning back to mainstream payment plans
- 50% decrease in the proportion of supported customers whose debt levels exceed $1,000
- 49% increase in the number of customers accessing SmoothPay payment arrangements
- 78% increase in the number of customers accessing our Customer Support Program
- 91% of hardship customers meeting their agreed payment plans (compared to 83% in 2013)
- approximately 50,000 calls made to the targeted WaterCare phone numbers that are promoted on WaterCare support materials
- $450,000 allocated from Department of Environment, Land, Water and Planning for the water efficiency program where eligible customers received a free water audit and minor plumbing works by a licence plumber. In 2015/16, the program assisted 1,022 customers, with a reduction in customer's water consumption by an average of 32%

FAIR FOR ALL CUSTOMERS

Qualitative feedback on WaterCare from both customers and community service agencies has also been overwhelmingly positive, and our hardship program has been recognised as better practice by a number of organisations, including the Energy and Water Ombudsman and the Consumer Utility Action Centre.

Approximately 94% of all customers surveyed said that our Language Other Than English (LOTE) service was better than any other similar service they use. In 2015/16, 15,535 calls were completed in a language other than English – 25% by external phone translation services and 75% by in-house consultants. The average time taken to manage these calls is 70% higher than standard calls.

Overall, 79% of our financially vulnerable customers rated their relationship and Yarra Valley Water service as better, or much better, than other utilities.

THE CHALLENGES WE FACE

Customers who have an ability to pay but choose not to do so

We do pursue payment from these customers using a variety of mechanisms including:

- use of third-party debt collection agencies or specialists
- restriction of water supply to the property
- legal action
- lien over the property (a lien serves to guarantee an underlying obligation, such as the repayment of a debt)

Since July 2012, we have had the option to charge customers interest on unpaid bills which we have chosen not to implement.

The possibility of restricting a customers water supply is an effective tool to engage customers who we have been unable to contact. This helps us identify customers who are experiencing financial vulnerability or hardship and those who choose not to pay their bill.

Customers who are unable to afford their water bill

Our customer research indicates that a large number of our customers have often or always have difficulty paying their utility bill. Only a small number of customers are actually aware of the services we offer for customers in hardship.

We have a range of programs available to support customers in hardship. We know that it is often those most in need of assistance who also struggle to access the services that are available due to issues of accessibility caused by language and literacy barriers.

Only 55% of those who always struggle have arranged a payment plan with a utility including us. Approximately 4% of our total customer base (30,000 customers) always struggle but aren't on a payment plan with us. Our challenge is to increase awareness so that those who require support know it is available for them.

For customers who experience hardship we have established programs which have largely been successful connecting people to the assistance they require. However, for Culturally and Linguistically Diverse customers and other customer segments that require additional support, the existing programs are inadequate. For these groups there is:

- frequent suspicion of government authorities (often due to their past experiences)
- lack of trust in utilities
- increased use of bottled water
- cultural nuances that require increased understanding to enable more effective communication
- difficulty in reading and understanding our communications

This provides the business with some challenges on how to best build relationships with these customers. Our standard communications and programs do not effectively reach these customers.

We propose to invest an additional $3 million over five years to extend our WaterCare program to better service these customer segments. The investment would include research, pilots and implementation of specific programs for these customers and will provide savings for the business and customers in the future e.g., lower call volumes, bad debts.

QUESTIONS FOR CONSIDERATION

- **Q** **Is our billing and collection approach appropriate?**
- **Q** **Under what circumstances should we:**
  - **restrict the water supply to customers who don't pay their bills?**
  - **charge interest on the bill to increase the rate of collection?**
- **Q** **What else should we do to support vulnerable customers?**
- **Q** **Do you support the investment of $3 million over five years for programs supporting customers who have difficulty accessing our services?**

We need to find a balance between price and service which is fair for everyone.
How should we do this?

OBJECTIVE 5: Guaranteed Service Levels

Guaranteed Service Levels define our minimum commitment to deliver a specified service level to individual customers. For each Guaranteed Service Level, we provide a rebate on bills to those customers who have received a level of service below the guaranteed level.

The existing set of Guaranteed Service Levels and the associated rebate amounts were last reviewed in 2013, as part of our price submission process. In reviewing the existing Guaranteed Service Level payments, we are interested to understand if they:

- reflect what customers value most
- appropriately compensate a customer for the impact of a lower level of service
- should be increased, given the change in prices since 2013
- give us incentives to meet our standards to all customers

Guaranteed Service Level payments form part of our business expenditure in a price review process, and therefore the revenue required from customers.

OUR APPROACH

Rebates to customers are generated and paid automatically, through a rebate on the customer's bill, based on detailed information contained within our asset management systems.

In addition, should customers contact us to advise us that they should receive a rebate, we will provide a rebate amount on their next bill as a goodwill gesture.

Where the rebate amount would exceed the customers next bill value, we will contact customers and provide them the opportunity for a direct payment.

REBATE	AMOUNT
Interruption to water and sewer supply: planned	
We cut off your water for more than five hours	$50
We fail to give at least three days' notice of planned water interruptions	$50
The interruption is longer than we said it would be	$50
We cut off your water between 5 am and 9 am and/or 5 pm and 11 pm.	$50
Interruption to water and sewer supply: unplanned	
Your water supply is lost for more than four hours	$50
We fail to restore a sewerage service interruption within four hours. This does not include sewer service interruptions caused by your pipe work	$50
We allow more than five unplanned water or sewerage interruptions in total during any 12-month period.	$50
We allow more than three unplanned sewerage service interruptions in total during any 12-month period.	$50
Debt recovery actions	
If we commence legal action or take steps to restrict a residential customer's water supply prior to taking reasonable endeavours to contact the customer and provide information about the help that is available for customers experiencing financial difficulty	$300
Sewage spills where we are at fault	
We fail to contain a sewage spill within your house within one hour	$1000
We fail to contain a sewage spill on your property within four hours.	$1000
Water flow	
We do not provide adequate water flow rate. Note – The price rebate ($50) may only be claimed once, unless we fail to take reasonable action.	$50
Entry on residential property	
We enter your property other than as allowed	$50
Response to customers	
We do not reply to your letter within four working days	$50

FAIR FOR ALL CUSTOMERS

OUR PERFORMANCE

Over the past three years we have paid an average of $1 million to customers for not achieving the guaranteed service levels, 70% of payments were made for an unplanned water supply interruption for more than four hours.

	3-YEAR AVERAGE	
	Number	**Value**
Interruption to sewerage service for more than four hours	1,887	94,350
More than three sewerage interruptions	11	550
Sewage spill on property for more than four hours	56	56,000
Water turned off (planned) in peak hours	430	21,500
Water turned off (unplanned) for more than four hours	14,704	735,200
More than five unplanned service interruptions	828	41,400
Water turned off (planned) for more than five hours	1,830	91,500
Sewage spill inside property for more than one hour	8	8,000
Total	**19,754**	**1,048,500**

We need to find a balance between price and service which is fair for everyone.

How should we do this?

Some of the issues in the existing Guaranteed Service Level scheme include:

- we haven't changed the reasons for or amount of rebates in a long time – they are not indexed and do not increase over time in the way our bills do each year
- water interruptions – often customers are not at home when the interruption occurs and therefore have not been inconvenienced by it – we automatically apply rebates to each impacted property – even if the property was vacant at the time of the interruption
- sewer spill rebates are the same for a spill in the house and one in the garden/ backyard. The rebate does not reflect the size and impact of the spill – nor any differentiation in the size of the spill
- the rebates do not distinguish between whether they occur on a weekday or on a weekend when customers tell us they are more inconvenienced
- customers do not receive any rebates for service interruptions

THE CHALLENGES WE FACE

Customers tell us that they accept an interruption to their service but expect issues to be fixed first time. The Guaranteed Service Level rebates do not provide a financial incentive for us to increase our investments to reduce the level of service interruptions. For example, we currently pay $750,000 for unplanned water supply interruptions versus the costs for additional crews to respond and rectify nearly all water interruptions within four hours at a cost to customers of $15.

QUESTIONS FOR CONSIDERATION

Q **What is the appropriate balance for the different drivers of a Guaranteed Service Level scheme? The different drivers include:**

- **being aligned to what customers most value and when service failures inconvenience them most,**
- **when the Guaranteed Service Level is not met, ensuring the rebate amount is appropriate**
- **providing a balance between payments to a customer for the inconvenience they experienced compared to an incentive to us to resolve the underlying service failure.**

CARE AND PROTECTION OF THE ENVIRONMENT

We need to find a balance between price and service which is fair for everyone.
How should we do this?

The long-term health and wellbeing of our community and economy depend on the environment. We aim to provide our services within the carrying capacity of nature and work across the entire water cycle with others to provide fully integrated and resilient water systems.

A fundamental priority is to ensure that our water and wastewater services are resilient to climate change, drought and population growth.

We recognise that our activities have an affect on the environment and have identified our key impacts. We have taken steps to lessen these over the last decade, including:

- being greenhouse gas neutral
- minimising nutrient discharge into creeks and rivers
- reducing the amount of water we take from rivers

We are proactively working on these challenges and are developing strong strategies for the long-term benefit of the environment. Customers tell us that caring for and protecting the environment is something they expect us to do.

- 85% of customers are concerned or have some concern about the environment;
- 30% of customers believe the water industry must play a larger role in conservation
- one of our Aboriginal community groups identified looking after the environment as the most critical aspect of what we do

They are also telling us that they value;

- minimising carbon emissions
- ensuring waterways are protected
- conserving water for the future

We are not seeking better outcomes for the environment at the expense of any other value we deliver to our customers.

OBJECTIVE 1: Minimising carbon emissions

The Australian water industry is a large consumer of energy and emitter of carbon. In Victoria, the water sector contributes almost a quarter (24%) of the government's greenhouse emissions (mainly from the sewage treatment process), followed by the train network (19%) and health care sector (18%).

The impact of hotter, drier summers, combined with a growing population, will increase the demand for water. Supplying high quality drinking water and removing and treating wastewater uses a great deal of energy. The size and breadth of our area means that we have to pump large quantities of water around and remove large amounts of wastewater from within the network. This means our carbon footprint is significant and reducing this will minimise the impact of our activities on the environment.

The State Government has committed to a long-term target for Victoria of net zero emissions by 2050, with metropolitan water utilities to reach net zero by 2030. This target aligns with the 2016 Paris Agreement in which 195 countries committed to keep global warming well below 2-degrees compared to pre-industrial levels, and to pursue efforts to limit the temperature increase to 1.5-degrees.

OUR APPROACH

While we need to ensure we are at least meeting State Government requirements to reduce carbon emissions, we are committed to doing the best we can.

Over the past seven years, we have used our Showerhead Exchange Program to fully offset our Greenhouse gas emissions. The offsets generated by this program will be fully utilised shortly.

CARE AND PROTECTION OF THE ENVIRONMENT

We have a three-step energy and environmental strategy that has us investing in:

1. **Energy efficiency** programs to **reduce** emissions
2. **Renewable energy** projects to **avoid** emissions
3. **Carbon abatement** activities which **offset** any remaining emissions

In keeping with our Strategy to 'make every cent count', we take a thorough and methodical approach to decide which investments are worthwhile when looking at ways to reduce our carbon emissions.

To tackle the causes of climate change, we have an aspiration to generate all the electricity we use by 2025.

Waste to Energy Facility

A key initiative is our innovative Waste to Energy facility at our Aurora Sewage Treatment Plant site in Melbourne's north. When completed in June 2017, the facility will generate electricity from biogas which is produced from food waste that would normally be sent to landfill.

The facility will generate enough electricity to run itself as well as the wastewater and recycled water treatment plant next door. Additional electricity will be sent into the electricity grid as renewable energy.

There is no cost to customers for the building and operating this facility as the fees paid by waste companies to us and the savings in not having to buy electricity cover all costs.

Our pledge to contribute to the Government's target

We are committing to having net zero emissions by 2030, with a 64% reduction to our baseline (average emission between 2010/11 – 2014/15) by July 2025.

Our plan to achieve our emissions reduction is underpinned by two major projects that will enable us to meet our emission reduction targets. These projects are a second waste to energy facility and a joint investment in a large scale renewable power station with other water utilities.

We estimate the cost of meeting our pledge to be less than $0.30 per customer each year.

OUR PERFORMANCE

In 2015/16, we generated 33,762 tonnes of carbon equivalent emissions generated from core business activities such as pumping water and wastewater through our network, treating wastewater, maintaining a fleet of vehicles and running our head office.

In the past eight years, we have achieved net zero greenhouse gas emissions by creating offsets from our showerhead program to offset the emissions that we generated.

THE CHALLENGES WE FACE

Customers say caring for the environment is somewhat important, but when compared to core business, it was considered a relatively low priority.

In meeting our 'pledge', there is a risk that the second waste to energy plant and joint funded renewable power station projects are not completed on time. This means we will have a shortfall in the environmental certificates required. If we had to source these certificates from the market, the costs for meeting the pledge would multiply by an estimated two or three times.

Additionally, there is the continued political and market risk that can impact the case for investment in renewable energy projects. If the Federal Government reduces the Renewable Energy Target, then it will likely impact the price of certificates which may make investment in renewable energy less attractive.

QUESTIONS FOR CONSIDERATION

- **Is our approach to meeting our 'pledge' appropriate?**
- **Is there anything else we should consider?**

We need to find a balance between price and service which is fair for everyone.

How should we do this?

OBJECTIVE 2: Ensuring waterways are protected

Waterways support a rich variety of plant and animal life, and provide a place for communities and families to enjoy, contributing to Melbourne's liveability. When speaking about water and its uses, customers regularly talk unprompted about clean rivers and beaches as important but do not see a significant problem as things stand.

Melbourne Water are the caretakers of waterways that flow into Port Phillip and Western Port catchments and work to protect them on behalf of the community. Together with local councils, Melbourne Water are jointly responsible for Melbourne's drainage system which include 34 stormwater drains that flow into Port Phillip and Western Port Bays. We work closely with Melbourne Water, councils and the Environment Protection Authority to ensure the waterways in our area are healthy and sustainable.

The Environment Protection Authority regulates any discharges from our treatment plants and spills to the waterways and other environmental impacts associated with our operations e.g., odour. They issue us with individual licences for each treatment plant that set the standards for compliance, and also enforce compliance with other environmental standards.

While some customers are supportive of us increasing our work to protect and care for the environment, the majority feel that it is more important that we don't increase prices as a result of this work. Customers have told us that there is limited understanding of the work that we do in this area.

OUR APPROACH

The main aim of the sewerage network, is to contain wastewater while on the way to our treatment plants and treat the wastewater to an acceptable level to be released back to the environment.

Sewage spills from control points

Spills for our network can occur because of pipe blockages, pump failures or capacity constraints. The network is designed for this with controlled overflow points, typically located near waterways, that allow wastewater to spill if required. This helps avoid spills occurring at the lowest point in our systems which can often be on customers' properties. Controlled overflow points are monitored, and connected to our alarm system. When there is a spill, an alarm will notify crews to investigate and clean up.

The Environment Protection Authority requires the reporting of spills (greater than 200 litres) which results in a:

- public health concern
- discharge to any waters, including any reservoir, billabong, canal, spring, swamp, natural or artificial channel, lake, lagoon, waterway, dam, tidal water, coaster water or groundwater
- discharge to land greater than 50 kilolitres

Reporting requires information to be provided including when the spill occurred, the impact, management action and the potential for public health and media interest.

Discharge of treated wastewater from sewage treatment plants are governed by licences administered by the Environment Protection Authority. These discharges are done in a manner that protects the environment. We monitor our discharges daily, and also monitor the broader waterways continually.

Sewage spills in a one in five-year storm event

The State Environmental Protection Policy Waters of Victoria regulation, administered by the Environment Protection Authority, requires our network to be designed to contain one in five-year storm events.

Over time cracks develop in the sewerage pipes, which means rain water and ground water can enter the pipes.

CARE AND PROTECTION OF THE ENVIRONMENT

Figure 25 shows in dry weather, the wastewater flow typically has a morning peak and an afternoon peak, and it is a fairly consistent flow pattern. During a storm (represented by the yellow line), rain water enters the sewer and the flows significantly increase, as shown by the blue line peak in the graph above. This can result in a spill.

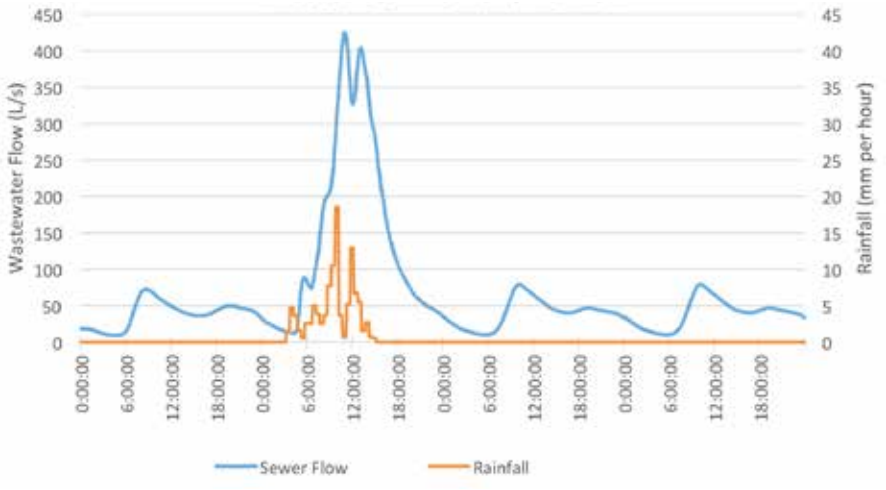
To prevent a spill occurring on a customer's property or public area, we have created controlled overflow points to divert the spill to a nearby drain or creek. As these overflow points only typically operate in wet weather, the wastewater only contributes a small percentage of the spill – resulting in minimal impact.

In 2015/16 we invested:

- $7 million maintaining and upgrading our treatment plants
- $3 million in sewerage network capacity upgrades
- $75,000 for monitoring and performance reporting by the Environmental Protection Authority

In addition our customers contributed approximately $30 million for environmental projects and catchment management across Victoria via the Government's environmental contribution.

Figure 25: Wastewater flow and rainfall



CASE STUDY: MERRI CREEK

We have partnered with Melbourne Water, the Department of Environment, Land, Water and Planning, together with local councils, to develop an alternative approach for waterway investment to meet the outcomes of the Environment Protection Authority's one in five-year standard. This standard requires that sewers should not spill in wet weather events that occur on average less than once in five years. The approach focuses on waterway health, amenity and biodiversity, and identified the investments required to deliver them at the lowest cost to the community.

We recently tested this 'outcomes based' approach with a pilot study focused on the Merri Creek. The study concluded that the main impacts to waterway health resulted from stormwater runoff e.g., roads and other hard surface areas, rather than wastewater spills – therefore additional expenditure to further prevent spills to Merri Creek may not be the lowest cost option to deliver the desired outcomes.

CASE STUDY: PROTECTING THE BAY

The carrying capacity of Port Phillip Bay for nitrogen and other nutrients was explored in 1996 study by the CSIRO. In addition to meeting current the Environment Protection Authority licence conditions, we have set a self-imposed limit of 87 tonnes of nitrogen discharged from our treatment plants per year.

This represents our contribution to sustainable levels in Port Phillip Bay.

Through investing in upgrades at our sewage treatment plants and by maximising the use of recycled water we will reduce nitrogen and nutrient discharges. We also ensure that we do not exceed the limit set out in the licence conditions for local waterways.

We need to find a balance between price and service which is fair for everyone.
How should we do this?

OUR PERFORMANCE

Figure 26: History of nitrogen discharged to waterways

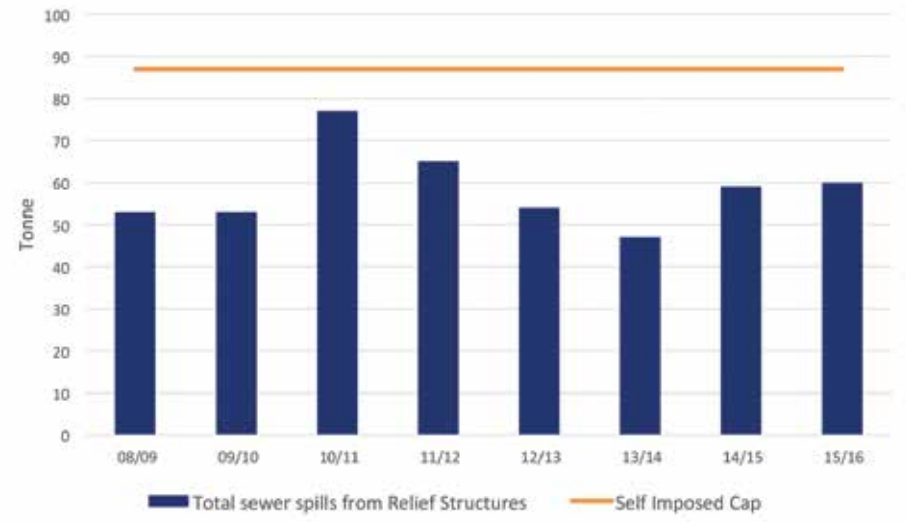
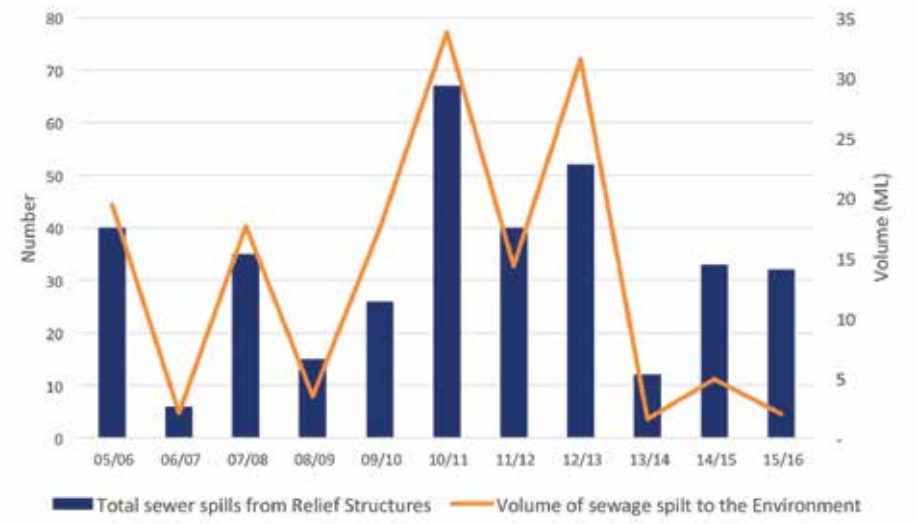


Figure 27: History of spills from relief structures



THE CHALLENGES WE FACE

Population growth, urban development and changing weather patterns mean that there is potential for significant increases in stormwater volumes and pollutants, with direct negative impacts on the health of local waterways and the environment.

The regulatory requirements are that the sewerage network must contain all wastewater and stormwater inflow to meet a one in five-year storm event. Due to climate change and variability a one in five-year event, is a costly requirement to meet, in some cases with no clear benefit for the local environment To achieve the standard we will need to upgrade the network at an estimated cost of $173 million. Alternatively, we could spend $47 million for a better community outcome in the area of waterway health by working with local community and stakeholders to achieve desired outcomes for the waterways.

QUESTIONS FOR CONSIDERATION

Q **Would you value us taking an alternative approach to resolving environmental issues for waterways?**

CARE AND PROTECTION OF THE ENVIRONMENT

OBJECTIVE 3: Providing modern wastewater systems (Community Sewerage)

Many homes in Melbourne were built before sewerage infrastructure was available, particularly on the urban fringe.

As a result, many homes in the northern and eastern suburbs use septic tank systems to manage their domestic wastewater. Of these systems, which are the responsibility of the owner to maintain, approximately 6,300 are not capable of meeting current environmental standards and present a potential risk to public health and the amenity of local waterways.

OUR APPROACH

Under the *State Environment Protection Policy (Waters of Victoria)*, it is the responsibility of councils, in conjunction with the Environment Protection Authority, through monitoring, to identify properties that are not capable of treating and retaining wastewater within their boundaries and to recommend priorities for properties to be connected.

Every five years, in-line with our price review process, we work with councils to prioritise our community sewerage program for those areas where environmental and health benefits can be achieved most cost effectively.

Traditionally we have provided sewerage pipes to non-sewered areas and encouraged customers to connect to our system. Recently we have run trials which show that for some properties it is likely that wastewater could be effectively managed onsite at a lower overall cost through the upgrade and installation of new septic tanks or with a 'hybrid' solution, such as small sewerage treatment plants to manage a cluster of properties.

We currently invest about $25 million each year on the community sewerage program and expect that we will replace 6,300 failing septic systems by 2030.

OUR PERFORMANCE

We measure our performance of our program by the number of properties that are provided with a modern wastewater system, together with the number of properties that connect (cumulative) see table below.

THE CHALLENGES WE FACE

We have the ongoing challenge of considering how we deliver a solution that is cost effective and acceptable to the majority of the community.

Poorly performing septic tank systems can damage the local waterways. The build-up of discharged wastewater can cause algal blooms, deplete oxygen in waterways and lead to the death of aquatic life. Poorly performing septic tank systems can also cause odour and soggy backyards with impacts often experienced by neighbouring properties and potentially a risk to public health.

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Number of properties provided with modern system	1,240	1,501	1,987	2,374	3,464	4,082	4,101	4,121
Number connected	387	646	878	1,253	1,632	2,252	2,885	3,008

We need to find a balance between price and service which is fair for everyone.
How should we do this?

Figure 28: Average cost to service a property by pricing period

In addition:

1. The costs of delivering the program are increasing every year due to material costs, construction techniques, and the areas we are servicing are more remote from the existing network and the more expensive areas have been left to later in the program. Figure 28 above provides the average cost to deliver a sewerage service per property since 2005
2. Some properties currently on the program are capable of managing their wastewater if upgrades are undertaken on their septic tanks. We will need to work with councils to reprioritise the program
3. Septic tanks are not 'set and forget' systems and require ongoing maintenance. Some septic tank owners do not undertake this maintenance work
4. Currently owners are not penalised for poorly performing septic tank systems that impact their neighbours in the local area
5. Some customers do not support connection to our sewerage system for reasons including:
   - having to start paying sewer servicing charges
   - wanting to stay on septic tanks to irrigate their property
   - recent upgrades to their septic tank,
   - unable to able to afford the plumbing costs to connect

QUESTIONS FOR CONSIDERATION

Q **What services should we provide to customers on existing septic tank systems?**

Q **How do we encourage customers to connect once the service is available?**

OBJECTIVE 4: Using water sensibly and ensuring sufficient water supplies for the future.

How we use water and the different supply options influence our long-term water availability. Our approach is a balance between supporting our customers to use water sensibly for the things they value through to ensuring any new sources of water occur at the appropriate time and are efficient.

Customers have told us that conserving water is something they expect us to do and they expect us to help them to save water as well. Customers want to know that we are planning ahead, supporting sensible water use and investing in infrastructure to safeguard our services and prevent high costs in the future.

In relation to ensuring water availability in the future, our main challenges are:

- population growth
- climate change (change in climate over longer-term)
- weather variability (periodic droughts and floods)
- providing for water-related urban amenity

The millennium drought (1997–2009) led to the construction of major water infrastructure for Melbourne, including the Desalination Plant and the North-South Pipeline. These projects have resulted in an increase level of water availability for the medium to long term.

Households make up most of Melbourne's water use, so saving water at home has a big impact on our water supplies. In addition, alternative water sources such as rainwater, stormwater and recycled water are actively used within our homes, businesses, schools and communities.

In 2016, the Government released their strategic plan for management of water resources – "Water for Victoria." It is based on the following vision:

Water is fundamental to our communities. We will manage water to support a healthy environment, a prosperous economy and thriving communities, now and in the future.

The Water for Victoria plan set the direction of water management in Victoria for decades to come.

In 2015/16 we paid Melbourne Water $285 million for the desalination plant and the storage and transfer of water. In addition we spent about $200,000 on water conservation programs for customers and $700,000 in proactive leak detection and monitoring in our network.

CARE AND PROTECTION OF THE ENVIRONMENT

OUR APPROACH

Our Urban Water Strategy outlines how we will plan to manage water availability and the capacity of the sewerage network over the next 50 years. Our key challenges are population growth, climate change and weather variability, at the same time ensuring parks, gardens and sporting grounds remain green and improving the environment. Our Urban Water Strategy aims to achieve five customer-focused outcomes:

1. Providing the community confidence in our long-term water availability and sewerage capacity
2. Ensuring the water we have is used sensibly
3. Being prepared for droughts and times of water shortages
4. Delivering water-related urban amenity to thriving communities
5. Engaging the community and Traditional Owners

Key highlights from the Urban Water Strategy are below, a full copy is available to the Jury in the reading room.

Long-term directions – community confidence in water availability

Faced with the scenario of growth combined with high climate change impact, we would need to add to or augment our bulk water resources by 2031 (on the same basis, the Melbourne water supply system will need to be augmented by 2028). If a significant drought occurs on top of this scenario, additional water supplies may be needed sooner. Our long-term water availability strategy is built on a foundation of being adaptable to cater for all future circumstances. The key activities associated with achieving this outcome are:

We need to find a balance between price and service which is fair for everyone.
How should we do this?

- providing ongoing information to our customers on our long-term water needs
- monitoring long-term trends
- becoming a leader in climate change adaption
- managing our short-term (one to three years) water availability requirements through optimal use of all our water resources
- making the most of our existing water resources and continuing to promote the efficient use of water through programs like Target 155 and our Schools Education Program
- diversifying our water sources, including water supplies that don't rely on rainfall

This underpins our adaptive approach to managing Melbourne's water availability over the next 50 years and ensures there is water resilience to meet the demands of the growing city and its water-related urban amenity. We will diversify our catchment -based water supply system, in collaboration with the water industry in Melbourne and Department of Environment, Land, Water and Planning, by considering the following:

1. Stormwater recycling and recycled water where it is feasible. We have already mandated recycled water for 100,000 new homes in Melbourne's Northern growth area, which will require six billion litres each year of recycled water when development is complete, and we are piloting advanced processes to recycle stormwater to drinking water standard
2. Desalination capacity – we understand that our customers believe that the expansion of the Victorian Desalination Project should only be considered once all other options have been explored and then only with extensive customer consultation
3. Trading water to other urban water utilities in southern Victoria to maximise the utilisation of water resources by all water users and reduce the need for water supply augmentations

Long-term directions – using the water we have sensibly

The community expects that our water be used sensibly, and we continue to focus on efficient water use behaviours such as Permanent Water Use Rules. The key activities to 'ensure the water we have is used sensibly' are:

1. Use of permanent water use rules, which are already in place across Melbourne
2. Promoting efficient and sensible use of water through:
   - water efficiency programs such as Target 155 – a voluntary water efficiency program that encourages Melbourne households to use water efficiently by aiming for a maximum of 155 litres per person per day
   - our Schools Education Program, assisting schools and early learning centres to integrate water as a topic into the curriculum for educators and students
   - encouraging schools to participate in the Schools Water Efficiency Program (SWEP), a Victorian Government initiative that enables schools to track their water usage using data logger technology
   - continuing to assist businesses and Councils to become more water efficient and explore alternative water sources
   - ongoing customer engagement on water efficiency
3. promoting the 'Choose Tap' program, which provides readily available drinking water that is cheap, supports public health and reduces waste. 'Choose Tap' makes tap water more accessible to the community with a range of initiatives focused on sports and recreation, health and wellbeing and an extensive education program

Long-term directions – being prepared for droughts and water shortages

Future planning is essential to manage periodic droughts and major water shortage events. Investing in climate-independent sources – such as desalination and other fit-for-purpose water sources – will go a long way towards mitigating the impacts of such events, but we still depend on catchment-based water sources.

We plan to provide a water supply without restrictions except during major emergencies, such as a major bushfire in our protected catchments or an extremely severe drought event. We will only consider using water restrictions during these emergency periods.

Our adaptive framework is based around three tiers and the level of Melbourne's storages to manage periods of water shortage and includes a set of actions to be undertaken in each zone. This framework is common to water utilities in Melbourne.

The water utilities in Melbourne produce an Annual Water Outlook on 1 December at the start of summer, as part of our Drought Preparedness Plan. This informs our customers about short-term water availability following the winter-spring dam filling period. We recognise that our customers require ongoing communication on water matters.

Long-term directions – providing water-related urban amenity to thriving communities

The Victorian Government's integrated water management approach aims to promote collaborative planning and management of water, land and related services to maximise economic, social and environmental benefits to the community. This planning is based on local values and priorities, with a focus on opportunities.

Integrated water management supports 'green and blue infrastructure' such as parks, wetlands, streams and urban vegetation. It can deliver multiple benefits including flood mitigation, urban cooling,

clean air, healthy streams and increased biodiversity, as well as contributing to recreation and amenity. A new integrated water management planning framework will guide the development of place-based integrated water management plans to provide these services and support liveable and resilient communities.

We take into account the complete water cycle when planning for Melbourne's growth. This means working with communities, councils and other partners to achieve the best community solutions. We have successfully used this approach in a number of areas, including our northern suburbs and Doncaster Hill developments. We are currently using it in the La Trobe and Monash National Employment Clusters and our community sewerage schemes such as at Monbulk and Park Orchards (see the map below for key opportunity areas).

Long-term directions – engaging the community and traditional owners

Community engagement is central to our planning – we use it to guide us in all our decisions about providing our services. Some of the best innovation come from listening and understanding. Customers have told us that there is an opportunity to better engage with the community about ongoing water availability planning.

We are committed to building on our initial meetings with Traditional Owners, to develop guiding principles for long-term meaningful engagement so that we can work together on the design, planning and management of water resources.

OUR PERFORMANCE

Figures 29 and 30 depict the fall in water use during the Millennium drought and the small increase since the drought broke from both an overall and individual customer perspective.

Figure 29: YVW total water usage per capita

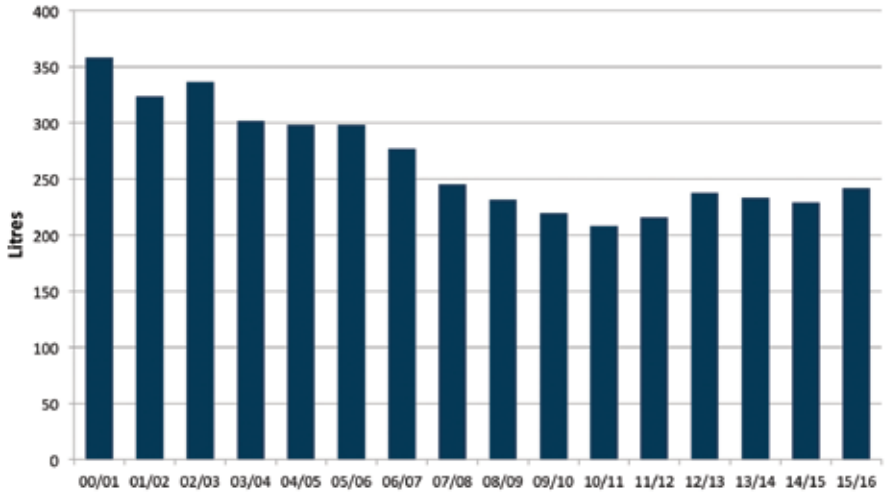
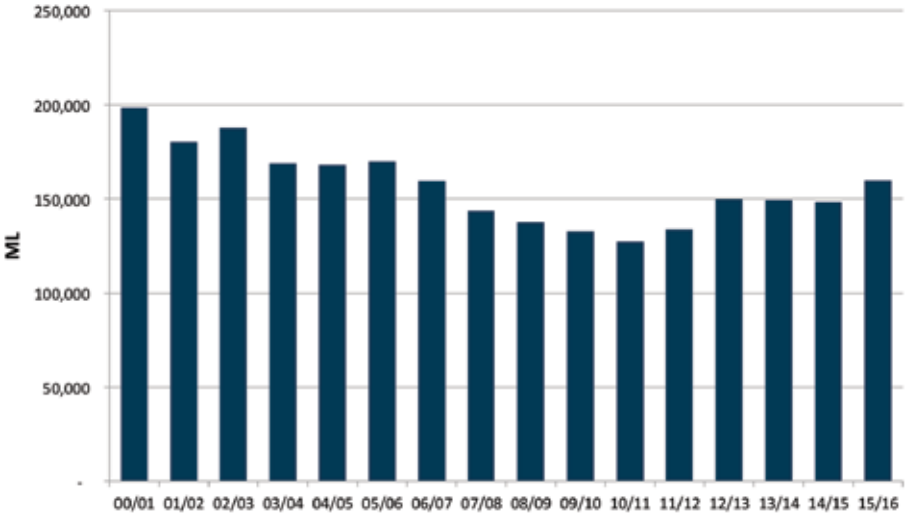


Figure 30: YVW total water use



We need to find a balance between price and service which is fair for everyone.
How should we do this?

Figure 31: Drinking water demand UWS forecast – Yarra Valley Water

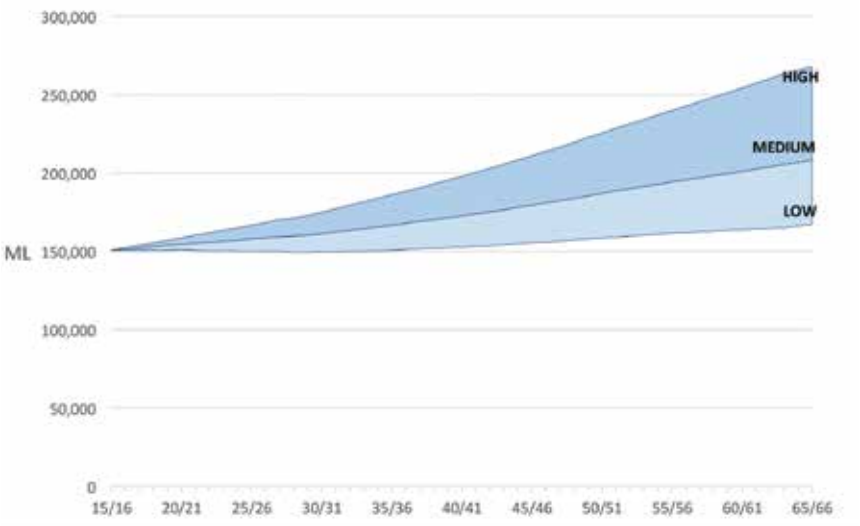
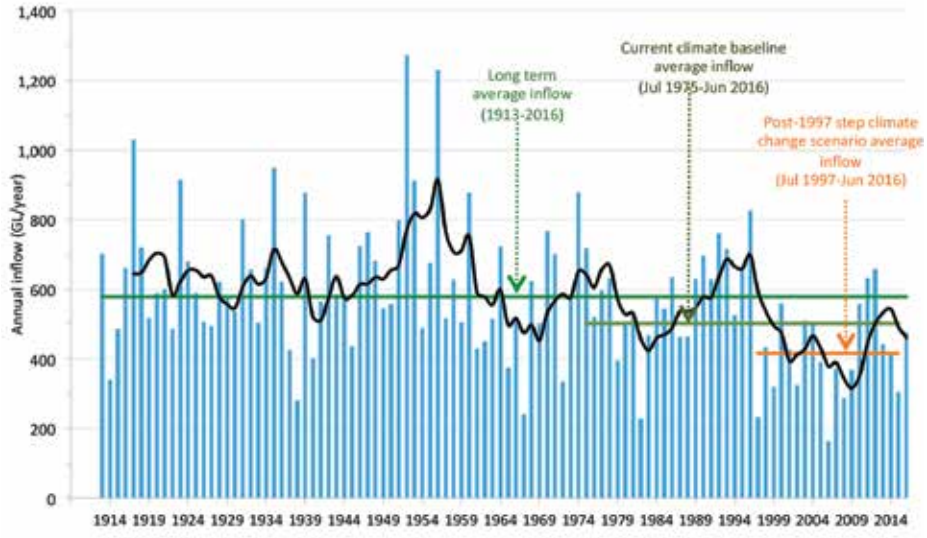


Figure 32: Inflows to Melbourne Water storages



THE CHALLENGES WE FACE

Melbourne will be a vastly different city in 50 years accommodating many more people, it is forecast our population will double. With more densely populated suburbs, it is likely to be a drier warmer place due to climate change.

The way we deliver water and wastewater services will change with technological and other innovations but we expect that customers will still expect sustained access to clean, affordable water and effective wastewater management.

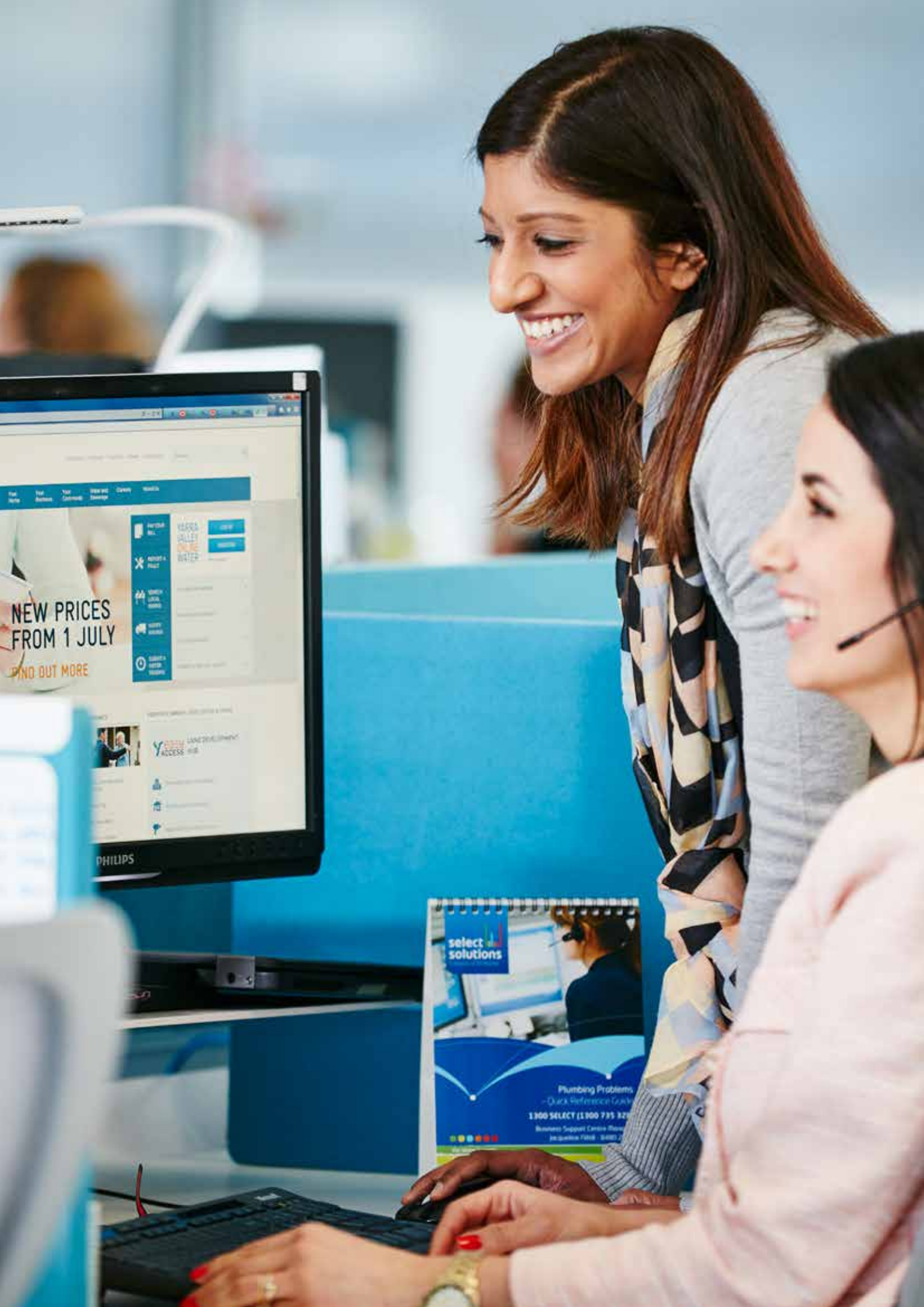
In addition, our customers will be looking to sustain and enhance the aspects that contribute to Melbourne being one of the world's most liveable cities, such as green open spaces for recreational activities and an improved environment including healthy rivers and streams that flow through our urban landscape.

Figure 31 shows the forecast demand for water over the next 50 years under various scenarios.

Figure 32 shows the significant decline in inflows to Melbourne water storages since the late 1990s.

QUESTIONS

Q **What do you expect of us in relation to water conservation and alternative water supplies now and in the future?**


NEW PRICES
FROM 1 JULY
PHILIPS
select solutions
Plumbing Problems

ONGOING PERFORMANCE REPORTING

We need to find a balance between price and service which is fair for everyone.
How should we do this?

What customers value is central to our price submission and includes:

- developing awareness and understanding of what customer's value
- identifying and testing with customers' possibilities to improve value for customers
- developing a submission that describes the programs and activities, costs and outcomes that is fit for what customer's most value

Performance reporting and engagement is an integral part of ensuring that our programs and activities remain aligned with what customers value. As part of our submission we will propose a reporting framework that will:

- track the progress we are making in our key outcomes and priorities
- reflect customer needs, including different needs of customer segments
- be accessible and report transparently and without bias
- be informed by and adapt to changing customer preferences

OUR APPROACH

The Commission as part of its regulatory functions, monitors and reports publicly on the performance of the Victorian water businesses. Since 1 July 2004, we report performance information consistent with the indicators and definitions outlined in the Commission's performance reporting framework.

We provide data for more than 130 indicators covering all aspects of our operations including network reliability and efficiency, customer service, drinking water quality and water conservation, reuse and recycling. These indicators cover:

- 20 common service standards for which all water businesses set performance targets each regulatory period. These have remained unchanged since developed in 2004
- additional service standards where performance targets are proposed in a regulatory period
- other indicators of performance collected for historical or trend purposes

The performance data provided to the Commission is independently audited to verify its accuracy and reliability.

In addition, to reporting by the Commission, other agencies use this data together with some additional information to produce reports comparing water utilities across Australia and National water balance reports.

These reporting requirements are in addition to statutory obligations such as our Annual Reports that include our performance for key water and sewerage, customer responsiveness and environmental indicators. These reports are available in hard copy and on our website.

Reports produced by regulators and other agencies are typically available on their websites.

OUR PERFORMANCE

The table on the next page sets out our service standards and target commitments from our current price submission that are reported to the Commission.

ONGOING PERFORMANCE REPORTING

SERVICE STANDARD	AVERAGE ANNUAL PRICE DETERMINATION TARGET
Customer service	
Complaints to Energy and Water Ombudsman Victoria (per 1,000 customers)	0.76
Telephone calls answered within 30 seconds (%)	77
Drinking water quality – customer complaints (per 1,000 customers)	4.3
Sewerage service quality and reliability complaints (per 100 customers)	0.01
Sewage odour complaints (per 100 customers)	0.03
Billing complaints (per 100 customers)	0.12
Water	
Unplanned water supply interruptions (per 100 kilometre)	56.7
Average time taken to attend bursts and leaks – priority 1 (minutes)	32.8
Average time taken to attend bursts and leaks – priority 2 (minutes)	44.7
Average time taken to attend bursts and leaks – priority 3 (minutes)	415.1
Unplanned water supply interruptions restored within 5 hours (%)	96.3
Planned water supply interruptions restored within 5 hours (%)	99.2
Average unplanned customer minutes off water supply (minutes)	24.2
Average planned customer minutes off water supply (minutes)	7.4
Average unplanned frequency of water supply interruptions (per 1,000 customers)	0.24
Average planned frequency of water supply interruptions (per 1,000 customers)	0.06
Average duration of unplanned water supply interruptions (minutes)	104.4
Average duration of planned water supply interruptions (minutes)	145
Customers experiencing more than 5 unplanned water supply interruptions in the year (number)	335
Unaccounted for water (%)	10

We need to find a balance between price and service which is fair for everyone.

How should we do this?

SERVICE STANDARD	AVERAGE ANNUAL PRICE DETERMINATION TARGET
Sewerage	
Sewer blockages (per 100 kilometre)	41.2
Average time to attend sewer spills and blockages (minutes)	52.8
Average time to rectify a sewer blockage (minutes)	196.3
Spills contained within 5 hours (%)	97.7
Customers receiving more than 3 sewer blockages in the year (number)	15
Compliance with Environment Protection Authority environmental discharge licences at sewage treatment plants (%)	100
Sewer backlog properties provided with a connection point (average number per annum)	1022
Reuse	
Recycled water from Yarra Valley Water's sewage treatment plants (%)	28.8
Biosolids recycled (%)	0
Drinking water quality	
Compliance with drinking water quality regulations and standards (%)	100

THE CHALLENGES WE FACE

Under the new framework we will report to our customers, at least annually, on our performance against the objectives and outputs we have proposed in our submission that are agreed by the Commission. We will also provide an overall assessment of whether we have delivered on the outcomes.

We want to develop a reporting framework for customers which will provide them with the level of information that meets their needs and expectations. We recognise that customers will have different preferences in terms of the extent of information and the channels through which the reports are provided.

QUESTIONS FOR CONSIDERATION

- **How should we best inform customers of our performance?**
- **Should we report what actions we undertook to achieve the performance target, what happened that prevented us from achieving the target when we don't meet it, what actions we propose to achieve targets in future years?**
- **What are the channels by which we should report to customers our performance?**
- **What else should we consider?**

Yarra
Valley
Water