

APPENDICES to report on findings from the WRAP (Water Resources Advisory Panel) FOCUS GROUPS on options relating to metering, tariffs and water transfers

February 2022



1. Final agenda
2. Types of water meter
3. Benefits of AMI meters
4. Pricing context
5. Tariff options
6. Water transfer options

1: FINAL AGENDA

SSC WRAP – Focus groups in February **Combined outline agenda FINAL**

Background

The SSC WRAP is a continuous form of engagement that, in each SSC water region, has brought 25 customers and future customer together in an online forum to explore customer preferences in terms of:

- Environmental ambition
- Levels of service/resilience ambition
- Water efficiency ambition: leakage/PCC/metering
- Best value planning criteria

As part of this ongoing engagement, SSC are looking to conduct a small online focus group in each region to further explore several key topics.

Sample and logistics

- One group per supply region using Zoom – SSW on the 8th February and Cambridge on the 9th February; both at 6.30pm
- We had originally assumed that each group would last for 90 minutes but feel that in light of the content, 2 hours would be more realistic. We will need to increase incentives slightly as we are also asking participants to do some pre-reading.
- Recruit 6 for 5
- Participants will be sent some information in advance of the group. We suggest that this is kept to the bare minimum so as to ensure that those who do not have time to read fully are not disadvantaged in the groups.
- Target profile:
 - Cambridge - 4 x HH customers, 1 x future customer, 1 x SME
 - SSW – 5 x HH customers, 1 x future customer
 - 3 to be on a smart energy meter
 - Mix of ages, gender, household size and SEG of household customers and some inclusion of customers on PSR (as far as possible given the small sample)
 - A mix of views on water transfers and AMI metering, where possible.

Objectives for Cambridge Water

- **Smart metering:** Being clear on what smart metering functionality customers actually want and exploring language to help underpin business decision to make investment into AMR or AMI.
- **Water transfers:** Understand if there is a clear customer preference for a particular type of transfer, and if transfers themselves are supported vs developing a distant new resource alone.

Objectives for South Staffs Water

- **Smart metering:** Being clear on what smart metering functionality customers actually want and exploring language to help underpin business decision to make investment into AMR or AMI.
- **Tariffs:** Explore high-level principles with customers to build evidence base for Ofwat around changes to tariffs.

Timing	Overview	Question areas	Stimulus to be developed
6.30-6.35	Welcome and introductions	<ul style="list-style-type: none"> • Moderator to outline the purpose of the session and thank participants for attending, as well as thanking them for commitment to the overall process. Cover all MRS points and introduce who is observing – SSC and customer panel. • Participants to briefly introduce themselves and share thoughts on the overall process/their involvement so far. <ul style="list-style-type: none"> • Ascertain which participants are on a smart energy meter 	
Smart metering			
6.35-6.50	Understanding of smart metering	Moderator to reassure participants that we are NOT testing knowledge or recall but simply wish to understand general perceptions of smart metering .	Moderator to have forum responses to hand as a prompt.

Timing	Overview	Question areas	Stimulus to be developed
		<ul style="list-style-type: none"> • Individuals to take a few minutes (make notes if they wish) and then feedback on how they would explain the overall concept of 'smart metering' to a customer who had never heard about the concept before? (at this stage participants can think beyond water) <ul style="list-style-type: none"> • Ask them to include what they perceive to be the broad benefits of smart metering? • Note those on a smart energy meters should consider how having a smart meter may have changed their behaviour (and link these behaviours to benefits if relevant). • Focus on smart water metering <ul style="list-style-type: none"> • What can they recall about smart metering in relation to water specifically? • How does their understanding of smart water metering fit with their overall views of smart metering? Are they more or less interested in smart water metering versus smart energy metering? Why is this? • Do they think that having a smart water meter would help reduce water consumption? Why/Why not? <ul style="list-style-type: none"> • How would it be more effective than an ordinary/dumb meter that has to be manually read? • Ask those on an energy smart meter to share their learnings (prompt for forum responses if necessary) 	

Timing	Overview	Question areas	Stimulus to be developed
		<ul style="list-style-type: none"> To what extent is behaviour influenced by how information is communicated e.g. app or online portal versus in-home display If not spontaneously mentioned, do they recall the different types of smart water meters (AMI/AMR) If they can recall, what do they perceive to be the differences between the two types of smart metering <ul style="list-style-type: none"> Was/is there anything they found confusing? Did/do they have a preference? Why? 	
6.55-7.10	Focus on AMI metering	<p>Reintroduce AMI and AMR metering</p> <ul style="list-style-type: none"> Spontaneous thoughts on the 2 technologies? Any questions about the 2 technologies that they would like to have answered? Remind participants that AMI came bottom of the list of priorities when they were asked to rank the roll out options in order of preference. <ul style="list-style-type: none"> Why do they think this was? <p>Focus on AMI</p> <ul style="list-style-type: none"> Participants to write down what they see as the key benefits of AMI technology. Explain that this is not a memory test, but we wish to understand both what might resonate with customers and the language they use. After hearing feedback from each participant, share on screen a list of pre-defined benefits relating to AMI: <ul style="list-style-type: none"> A) Quicker customer side leak/wastage detection e.g. able to identify a leak in an underground pipe or that water is being lost because 	<p>Edit stimulus used on previous online forum to focus on AMR/AMI metering</p> <p>Develop slide to display key benefits of AMI metering</p> <p>Develop a priorities question to capture information on Zoom</p>

Timing	Overview	Question areas	Stimulus to be developed
		<p>of a dripping tap or leaking toilet. This is because meter reading is automatic in real-time as opposed to the drive by readings required by AMR. This means that</p> <ul style="list-style-type: none"> • B) Ability to target water efficiency campaigns/activities more precisely (as gives customer usage in real-time) can instantly see what communications are working and change them, if necessary. • C) Ability to provide customers with information about daily usage or monthly usage and relevant alerts – e.g. you get an alert to let you know if your normal use was higher than normal over a week period or if the water is flowing overnight which might indicate a leaking pipe. • D) Allows for more accurate billing for customers as the water company not waiting on twice monthly drive by meter reads or manual meter reads. This means that the water company doesn't have to estimate your bills (unless there is a problem with your meter). • E) Allows customers to have more control over their water usage: the regular meter reads can be shown on a in-home dial (like electricity smart meters or provided on an APP or online portal so customers can login at any time to see how much water they are using, where they are using it and how their usage compares to other similar households. Personalised 	

Timing	Overview	Question areas	Stimulus to be developed
		<p>hints and tips could also be given to help customers save water and money, like SSW's Get Water Fit service (although this is not currently linked to water meter readings)</p> <ul style="list-style-type: none"> • F) Better able to target leakage on the company network as the water company knows in real-time (rather than twice a month) where water is going, which also allows better decisions to be made about how to manage where demand for water is happening and at what times and also invest in improving the pipe network • G) Reduces environmental impact resulting from meter reading (as not reliant on drive by readings and the associated vehicle emissions) and by treating and pumping less water it reduces energy costs and carbon emissions • How do they feel about AMI metering now? • Anything they hadn't considered before? • Anything that has changed their views • Which benefits do they find most/least compelling? <ul style="list-style-type: none"> • Participants to take a few minutes to identify their top 3 benefits via zoom polling • Individuals to feedback groupings and share any reasons behind choices • Probe to see if they think that alerts and information about flow would prompt behaviour change. 	

Timing	Overview	Question areas	Stimulus to be developed
		<ul style="list-style-type: none"> How do they feel AMI compares to AMR now and what do they think the priority should be in terms of roll out of universal metering? Remind them: <ul style="list-style-type: none"> AMR meters allow the company to collect meter readings potentially up to twice a month and this brings advantages e.g. it will alert the water company if it looks like there is a water leak. It may be that in the future bin lorries can take readings and make readings available weekly or monthly across the entire region. AMR will be less costly in the short and long-term as the infrastructure is easier to put in place and already exists in some areas and the upfront investment to put the infrastructure to enable AMI is much higher There is potential to upgrade AMR meters to AMI meters in the future by adding an initial piece of technology that allows the meter to be read remotely Note the cost of both AMI metering and AMR meters will be passed on to customers through their bills. It has been estimated that the cost of rolling out universal metering by 2040 with AMR meters would be an extra £3.50 a year on your water bill (or £52.50 in total) to have universal metering completed by 2040? Using AMI meters, it is likely to be an extra £4.20 a year on your bill (or £63 in total) between 2025 and 2040. 	

Timing	Overview	Question areas	Stimulus to be developed
7.15 – 7.35	Bringing it altogether and then comfort break before next topic	<p>You may have your own particular preference but we would now like you to work in pairs to come up with an argument both for and against the roll out of AMI metering. Imagine you are trying to communicate your views to other customers and be as persuasive as you can.</p> <ul style="list-style-type: none"> • We need water companies to invest in AMI smart meters NOW because..... • We see no reason to roll out AMI smarter meters NOW because.... <p>Return to main group and feedback</p> <p>Note to moderator IF NECESSARY: Battery life can be reduced if the frequency of the readings is higher (with some technology solutions), i.e. receiving readings daily (20 years) to receiving every 15 minutes (15 years). If frequency of meter reads is identified as a key benefit does the risk of losing years of shelf life change their view of frequency of reads?</p>	An outline of the task for participants to refer to in breakout groups
Water transfers			
7.35-8.10pm	Reviewing water transfer options	<p>Moderator to outline why water transfers are being considered:</p> <ul style="list-style-type: none"> • You will likely all remember that, due to climate change and the growing demand for water from an increasing population, the water company has to look for ways to ensure that possible future droughts do not result in any major disruptions to customers' water supply. 	Participants to be sent link to previous stimulus on water transfers AND a document in advance that outlines the 4 water transfer options to be discussed. Explain that we

Timing	Overview	Question areas	Stimulus to be developed
		<ul style="list-style-type: none"> • Water companies also need to consider helping other water companies to avoid major disruptions to the water supply to their customers. • Then there is the environmental impact. As we discussed in the first Forum, water companies cannot simply take what water they need all the time to meet customer demand. Abstracting, or taking water, changes the natural flow pattern of rivers and streams (which can cause harm to the plants and animals that live there) as well as reducing the overall amount of water in the water environment. For example, many rivers and streams are fed from underground water sources, which is where your drinking water comes from. • The impact of climate change on rainfall levels and patterns is also forecast to reduce the amount of water in underground water stores over time. • Many (but not all) of you told us in previous discussions that you want water companies to aim for an ambitious environmental plan to restore the health of water bodies, despite the fact that this would mean bills would need to go up. • Water transfers are one way of increasing the supply of water in some areas, whilst minimising the impact on the water environment. • It is important to note that water transfers are already happening every day between many water companies, but these are mainly smaller in nature and won't meet the long-term challenges there are for meeting customer demand for water. 	<p>will also be explaining everything in the group so no need to feel overwhelmed.</p> <p>Dan Clarke to be available for questions.</p> <p>Note of participants' previous responses to water transfers taken from the online forum.</p>

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		<ul style="list-style-type: none"> • Even if demand is reduced through leakage, metering and other approaches like water recycling and education this won't be enough to meet future demand reliably and protect the environment – so new sources of water will still need to be found. • Water resources may be shared via transfers within a company's supply area, between water companies within the region, or between different regions of the UK. So as a customer, depending on where you live, your local area may share or receive water to meet the local demands, and this may change over time. Is it important to remember water transfers are NOT there as way for one water company to make profits for selling water to another region. <p>ASK:</p> <ul style="list-style-type: none"> • Brief recap on how participants feel about the general principle of transferring water from one region to another (prompt from forum findings if necessary). • Have they had any further thoughts about water transfers since they took part in the second forum? If so, what? • How did they feel overall about the options that were sent in advance? • Ask the for their preferred option, before moving on to go through each option in more detail. <p>Review the 4 options (show on screen) Option A:</p> <ul style="list-style-type: none"> • Read through the transfer option 	

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		<ul style="list-style-type: none"> Any questions about this transfer option? Anything you particularly like about this transfer option? Anything that particularly concerns you? <p><i>Repeat for each option.</i></p> <p>Then show summary of all 4 options on screen and check for any final questions</p>	
8.10pm-8.25pm	Ranking water transfer options	<p>Allow participants 2-3 minutes identify their preferences.</p> <ul style="list-style-type: none"> Each participant to feedback how they have ranked the 4 options? Can they give reasons for their rankings? What have they heard in the session today that has really resonated/informed the order with which they have ranked the options? 	Ranking question in Zoom
Tariffs			
7.35-7.50	Review principle of charging	<p>Make customers aware of the current situation with how charging works.</p> <ul style="list-style-type: none"> Outlining the key benefits of drawbacks of the approach Including issue of how companies can't make more or less money over an AMP even if customers use more or less water over the period <p>ASK</p> <ul style="list-style-type: none"> How do they feel about the current methods of charging for water? (If necessary, remind participants that this is 	<p>Word summary of the current charging summary to be sent out in advance</p> <p>Background slide on pricing to share in the group (based on the background summary sent out in advance)</p>

Timing	Overview	Question areas	Stimulus to be developed
		<p>not a discussion about whether or not water companies should be re-nationalised)</p> <ul style="list-style-type: none"> What do they see as the main advantages and disadvantages of how the current charging system works? <ul style="list-style-type: none"> FOR THE CUSTOMER and the WATER COMPANY? Any views on how current charging arrangements can encourage behaviour change (and ensure current customers use less water) Do they agree that there may be an appetite for different tariffs that offer different pricing structures for water depending on the amount of water used? <ul style="list-style-type: none"> If so, what do they think is driving this? 	
7.50-8.15	Explore possible tariff options	<p>Explain that any change to how water is paid for (i.e. any of the possible tariff options being shared today) will be dependent on achieving universal metering (getting almost all households on meters) and Ofwat agreeing to any necessary changes to regulation. However, we would still like to understand customer views about possible tariff options.</p> <p>There are various options that could be explored.</p> <p>Option 1 - Community based incentives</p> <ul style="list-style-type: none"> The idea is that customers in the region would be awarded an incentive (such as points) for every litre of water saved by a household throughout a 12-month period – this could be against a set target based on their household size and number of occupants or vs usage the 12 months before. The incentives (points or similar) are added up across the community/region. 	Each option to be shown on a slide and talked through

Timing	Overview	Question areas	Stimulus to be developed
		<ul style="list-style-type: none"> Any money saved by the water company having to treat, store and pump less water allows the incentive (points or similar) to be converted into a pot of money. The funds would then be used to fund local community projects. Customers who have opted into the tariff would be able to vote for the projects that they would like to see supported by this fund <p>ASK</p> <ul style="list-style-type: none"> What are their initial reactions to this approach? Explore likes and dislikes What questions do they have? What else do they need to know? If this approach was to go ahead, do they have a preference for the types of community projects that would benefit? E.g. environmental groups, work with children, work with older people etc. <p>Option 2. Financial incentives for individual customers</p> <ul style="list-style-type: none"> The idea is that tariffs would be structured around household usage and acceptable water usage limits – which would be based around essential water usage (i.e. the amount of water needed for bathing, cleaning, cooking, flushing the toilet, washing clothes). Support mechanisms would be in place for customers living in vulnerable circumstances, including larger families There are several approaches to consider within this option: 	

Timing	Overview	Question areas	Stimulus to be developed
		<p>APPROACH A: A SET LIMIT</p> <ul style="list-style-type: none"> • If a household stays within the acceptable usage limit the less it has to pay per unit of water – the cost per unit (i.e., litre of water would be less than what water costs now to ensure water for essential everyday uses is affordable for as many customers as possible. The household limit is worked out by multiplying the number of people in the household by the acceptable usage limit. • However, if a household goes above the acceptable usage limit, they would pay an increased charge per unit of water used. • For example, a household has a set tariff for per litre under an acceptable usage limit (80l/p/d) but pays more per litre if they go above this limit <p>APPROACH B: USAGE BANDS</p> <ul style="list-style-type: none"> • Customers pay different amounts per litre depending on usage bands. For example, prices could be set so that customers pay a certain amount per litre if they used 80l/p/d and this increases as they move up the bands (80-90l/p/d, 90-100l/p/d, 100-110l/p/d) etc. <p>APPROACH: TIME-BASED USAGE</p> <ul style="list-style-type: none"> • Customers pay different amounts per litre for their water, depending on the time of day they use it. <ul style="list-style-type: none"> • Similar to an electricity Economy 7 tariff. This is a type of electricity plan that offers two different rates for electricity. One rate covers the day, and the other covers the night. 	

Timing	Overview	Question areas	Stimulus to be developed
		<ul style="list-style-type: none"> • Or to off-peak and peak time telephone calls. • The benefit of a time-based tariff is that it can help smooth out demand peaks for water, which means less low pressure and supply issues for customers during periods of very high demand – like dry/hot periods. It also, means the company can manage the network better, which should reduce costs and help keep costs down long-term – which helps keep bills down. <p>ASK</p> <ul style="list-style-type: none"> • What are their initial reactions to these different approaches to financial incentives for individuals? • Explore likes and dislikes of each (set usage limited, banded usage, time-based usage) • What questions do they have? What else do they need to know? • If an approach based on usage was to go ahead: <ul style="list-style-type: none"> • Would they prefer to see a specific usage target or usage bands? • Would they like to see all of them used with customers given the choice of which tariff to go onto, or would that become too complicated? <p>Now thinking about the different tariff options – Individual versus community incentive</p> <ul style="list-style-type: none"> • Which one do they think will be most motivating for customers? • If water companies are not allowed by Owfat to look at developing individual tariffs, should they still look at developing a tariff that has community benefit? 	

Timing	Overview	Question areas	Stimulus to be developed
8.15-8.25	Support/tariff options currently available to customers [if there is time]	<p>THIS SECTION WILL ONLY BE COVERED IF THERE IS TIME</p> <p>The Water Company has already outlined a number of tariff options as it considers universal metering and there are various support options available under the 'blue deal tariff' (you will have seen these in the previous forum):</p> <p>A price cap guarantee where customers moving on to a meter will not pay more than 25% more than the cost of their unmetered bill for 2 years. This will allow time to make changes to the household's water efficiency.</p> <p>For those with a medical need: A price cap set that guarantees that customers will not have to pay more than they did when unmetered for 24 months. If their metered bill turns out to be less, they pay the lower amount.</p> <p>For those on low incomes: The Assure tariff whereby they pay 60% of their bill in year 1 and 40% in year 2. Their circumstances are assessed every 2 years to ensure they remain eligible. They could also qualify for additional help, for example, they may be able to access the Water Company's charitable trust fund to support water efficient white goods?</p> <ul style="list-style-type: none"> • Do you have any questions about the support options? • Overall, do you feel that there is enough support for customers if there is a move to universal metering • What else would you like to see? 	

Timing	Overview	Question areas	Stimulus to be developed
		<ul style="list-style-type: none"> Now that you have more information on how vulnerable customers may be supported, how do you feel about possible changes to individual tariffs? 	
8.25-8.30	Thank and close	Recap of key takeouts Explain incentive process Mention the final stage of the project will be coming up in the next couple of months where SSW/CW will test their preferred plan based on all the customer feedback and other analysis vs alternatives and ask customers for their views on this.	

2: TYPES OF WATER METER

3 different types of water meter.....

**Digital
Meters**



**Manual/Analogue
Meter
“Dumb”**



**Automatic Meter
Reading (AMR)
“Smart capable”**



**Advanced Metering
Infrastructure (AMI)
“Smart”**

It is worth remembering that there are different types of water meter:

Firstly, there is the Manual/Analogue Meter or what is known as a “Dumb” meter. These are read manually by a meter reader who then enters data manually into water company’s billing system. Usually they are read once every 6 months for billing purposes. Sometimes they can be difficult to access because they are fitted fairly deep underground – for example underneath the pavement.

- **SSW:** Just over 131,000 of the 230,000 (or 57%) meters currently installed across the South Staffs Water region are “dumb” meters.
- **CAM:** Just under 58,000 of the 101,000 (or 57%) meters currently installed across the Cambridge Water region are “dumb” meters.

Secondly, there is a digital radio meter that allows Automatic Meter Readings, or AMR meters for short.

A meter reader walks-by/drives-by the meter (this could be a bin lorry) with a device and automatically (via a secure wireless radio) collects meter readings and then sends the information securely to update the water company’s billing system. These types of meters allow the company to collect more regular readings **(potentially up to twice a month)** and provides other useful data e.g. it will alert the water company if there is a continuous flow which may indicate a water leak. Since the beginning of this year, all new or replacement meters installed in the **South Staffs Water/Cambridge** region have been AMR meters that can be upgraded to the latest meter reading technology. There are many AMR meters already installed that just need to have a bit of kit attached to the meter to allow them to be read remotely on a regular basis.

Thirdly, there is a more advanced 'Smart' Meter or to give it the technical name an Advanced Metering Infrastructure (or AMI) Meter. These are more expensive than AMR meters. This type of meter: AMI water meters store readings which can then be sent securely **hourly or daily to your water company**. This works by automatically sending signals out at set times, which are then picked up by masts (antennas) or other radio networks installed by companies. This is similar to energy suppliers, whose smart meters store readings and then submit them securely up to every 30 minutes. The water meter readings are fed into the water company's customer database and used for lots of different things including billing, better understanding of water usage, leakage and network operations. The water company can, over time, provide customers with even more accurate information about their water usage and type of leak e.g. if it's on customer pipe vs a plumbing loss and therefore potentially be able to fix and identify leaks quicker than AMR.

There is no need for a meter reader to go out to read meters, but upfront investment is needed to install the infrastructure (e.g. radio masts) that supports this fully 'Smart' meter. Whether or not South Staffs Water goes ahead with universal metering, they would like more of their customer to have smarter water meters in the future as a range of studies over the last few years show that, on average, providing more meter reads and tailored support helps to reduce people's water consumption (some early studies have shown that customers on AMI meters can save around 5% more water than those on AMR). It is important to remember that whatever type of meter is fitted, your water company would not be able to turn your water supply off remotely if you failed to pay your bill for some reason, as this is against the law.

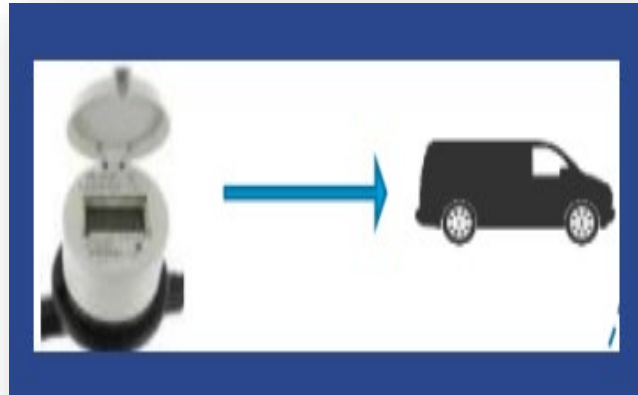
3: BENEFITS OF AMI METERS

3 different types of water meter.....

Digital Meters



**Manual/Analogue
Meter
“Dumb”**



**Automatic Meter
Reading (AMR)**



**Advanced Metering
Infrastructure (AMI)**

KEY POINTS TO REMEMBER ABOUT AMR METERS

- AMR meters allow the company to collect meter readings potentially up to twice a month and this brings advantages e.g. it will alert the water company if it looks like there is a water leak. It may be that in the future bin lorries can take readings and make readings available weekly or monthly across the entire region.
- AMR will be less costly in the short and long-term as the infrastructure is easier to put in place and already exists in some areas and the upfront investment to put the infrastructure to enable AMI is much higher
- There is potential to upgrade AMR meters to AMI meters in the future by adding an additional piece of technology that allows the meter to be read remotely
- Note the cost of both AMI metering and AMR meters will be passed on to customers through their bills. It has been estimated that the cost of rolling out universal metering by 2040 with AMR meters would be an extra £3.50 a year on your water bill (or £52.50 in total) to have universal metering completed by 2040. Using AMI meters, it is likely to be an extra £4.20 a year on your bill (or £63 in total) between 2025 and 2040.

A. Quicker customer side leak/wastage detection e.g.

able to identify a leak in an underground pipe or that water is being lost because of a dripping tap or leaking toilet

B. Ability to target water efficiency campaigns or activities more precisely (as gives

customer usage in real-time). Can instantly see what communications are working and change them, if necessary

C. Ability to provide customers with information about daily usage or monthly usage and relevant alerts – e.g. you get an

alert to let you know if your normal use was higher than normal over a week period or if the water is flowing overnight which might indicate a leaking pipe

D. Allows for more accurate billing: for customers as the water

company does not have to wait for fortnightly drive by meter reads or manual meter reads. This means that the water company doesn't have to estimate your bills (unless there is a problem with your meter)

E. Allows customers to have more control over their water usage: the regular meter reads can be

shown on an in-home dial (like electricity smart meters) or provided on an APP or online portal so customers can login at any time to see how much water they are using, where they are using it and how their usage compares to other similar households. Personalised hints and tips could also be given to help customers save water and money, like SSW's Get Water Fit service (although this is not currently linked to water meter readings)

F. Better able to target leakage on the company network: as the water

company knows in real-time (rather than twice a month) where water is going, which also allows better decisions to be made about how to manage where demand for water is happening and at what times and also invest in improving the pipe network

G. Reduces environmental impact resulting from meter reading (as not reliant on

drive by readings and the associated vehicle emissions) and by treating and pumping less water it reduces energy costs and carbon emissions

Task

Imagine you are trying to communicate your views to other customers and be as persuasive as you can.

- We need water companies to invest in AMI smart meters NOW because.....
- We see no reason to roll out AMI smarter meters NOW because....

4: PRICING CONTEXT

How water customers are currently charged for water

Water companies are legally allowed to charge customers for their water usage in one of two ways:

Rateable Value (unmetered charge)



- Rateable values based on the annual rental value of a property taking account of its size and condition and access to local amenities.
- Rateable value is no longer used as the basis for local taxation having been replaced by the Council tax system. However, the system is still used for water charges where there isn't a water meter at a property.
- Water companies have no power to change the rateable value and customers can't appeal against it.

Water meters (metered charge)



- Water meters measure how much water a household uses.
- Your supplier uses readings from the meter to calculate how much to charge you for your water and sewerage services.
- If you have a meter, the amount you pay will depend on how much water you have used.
- The cost for each litre of water used by customers may vary by water company, but within each supply area the cost is the same for all household customers, regardless of how much they use.
- There is also a fixed standing charge each year for having a water meter, which pays for the installation, maintenance and reading of all water meters.
- Companies have to install a water meter free of charge at a customer's request, provided that the property's pipe work allows this and the installation won't be too expensive.
- If a water meter can't be fitted because of your property's plumbing, or the water company considers it too expensive, they should offer to place customers on an assessed charge scheme, if the assessed charge is lower than the current rateable value.
- In some areas of England and Wales, classified as water stressed, water meters are already compulsory.

Ofwat's role in the price of water

In England and Wales, only business water customers are able to choose their water supplier. Household customers do not get a choice.

Because competition is limited, there is a risk that these companies will not deliver the services their customers want. They may also charge higher prices to increase their profits. This is one of the reasons why all large water companies need to be regulated. And it is why Ofwat, the Economic regulator for water, was created when the water and sewerage sectors were privatised in 1989.

One of the ways Ofwat regulate is to set the price, investment and service package that customers receive. This includes controlling the prices companies can charge their customers every 5 years. When they do this, they have a duty to balance consumers' interests with the need to ensure the sectors is also able to finance the delivery and improvement of water and sewerage services. They also need to ensure water companies are able to meet their other legal obligations, including their environmental and social duties.

Ofwat currently carry out a review of these price limits every five years.

Once Ofwat have set the price control for a 5-year period water companies are not able to make more or less money over that 5-year period. It gets complicated, so here is an example to help explain it.

During COVID-19 people used more water overall as many were working from home or locked down for long periods. Metered customers would have been paying more from their bills so income for the company would have gone up in that year.

However, Ofwat has a mechanism in place to compensate for this which means the cost of water two years later would then fall for all customers so the income the company receives would be lower for the remaining 5-year period. By the end of the 5-year period this mechanism ensures that the amount of money earned by the company from customer bills is the same as the amount agreed with Ofwat at the start of the 5-year period.

Under Ofwat's current rules, charges have to be reflective of the costs of providing the service so that there is no cross-subsidy between different customers based on the service they receive from their water company. An example is that the difference between a metered charge and an unmetered charge should only reflect the cost of the installing, maintaining and reading the meter.

Potential for change?

South Staffs Water has conducted research with customers and there has been a very positive response to the idea of new tariffs that offer different pricing for water depending on the amount used. However, currently Ofwat do not currently allow

these, or any other types of tariffs, to be implemented outside of the current Rateable Value and metering options.

In order to allow for the possibility of regulators to allow water companies to develop new tariffs for water charges the following things would need to happen:

- There must be sufficient, robust evidence that customers support bringing in new ways of charging for water.
- There must be compelling interest that this change is in the best interest of customers and will not disadvantage any particular group of customers.
- The company would need to install the latest water metering technology at the vast majority of customer properties to allow it to roll-out new tariffs based on water use.

The change would need to be written into the latest Water Industry Act and then passed through the House of Commons and House of Lords and into Law. Ofwat would then be able to apply a change to any water company licences to allow them the powers to bring in new tariffs for customers.

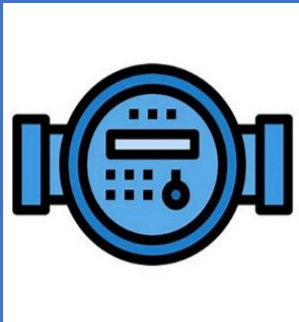
Background to pricing

Currently there are two methods of charging:

Rateable/ unmetered



Water meters/ metered



Ofwat set the price for a 5-year period.

Water companies are not able to make more or less money over this period.

South Staffs Water has conducted research with customers and there has been a very positive response to the idea of new tariffs that offer different pricing for water depending on the amount used.

Ofwat does not currently allow these, or any other types of tariffs, to be introduced outside of the current Rateable Value and metering options.

An aerial photograph of a city, likely Glasgow, showing a dense urban area with a river (Glasgow River) winding through it. The city is surrounded by green hills and forests. The sky is clear and blue.

Option 1 – Community based incentives

The idea is that customers in the region would be awarded an incentive (such as points) for every litre of water saved by a household throughout a 12-month period

The incentives (points or similar) are added up across the community/region.

Any money saved by the water company having to treat, store and pump less water allows the incentive (points or similar) to be converted into a pot of money.

The funds would then be used to fund local community projects.

Customers who have opted into the tariff would be able to vote for the projects that they would like to see supported by this fund



Option 2 - Financial incentives for individual customers

The idea is that tariffs would be based on how much water households need to use i.e. the amount of water needed for bathing, cleaning, cooking, flushing the toilet. For now, we are calling this 'the acceptable usage limit'.

Support mechanisms would be in place for customers living in vulnerable circumstances, including larger families

There are several different types of tariffs that could be considered



APPROACH A: SET LIMIT

- If a household stays within the acceptable usage limit, the less it has to pay per unit of water – the cost per unit i.e. a litre of water would be less than what water costs now to ensure water for essential everyday uses is affordable for as many customers as possible. The household limit is worked out by multiplying the number of people in the household by the acceptable usage limit.
- However, if a household goes above the acceptable usage limit, they would pay an increased charge per unit of water used.
- For example, a household could pay a set tariff per litre for water up to 80 litres per person per day but then pay more per litre if they go above this limit.

APPROACH B: USAGE BANDS

- Customers pay different amounts per litre depending on usage bands.
- For example, prices could be set so that customers pay a certain amount per litre if they use up to 80 litres per person per day and this increases as they move up the bands (80-90 litres per person per day, 90-100 litres per person per day, 100-110 per person per day etc).



- **APPROACH C: TIME-BASED USAGE**

- Customers pay different amounts per litre for their water, depending on the time of day they use it.
- Similar to peak and off peak telephone calls or an electricity Economy 7 tariff.
 - This is a type of electricity plan that offers two different rates for electricity. One rate covers the day, and the other covers the night.
- The benefit of a time-based tariff is that it can help smooth out demand peaks for water, which means less low pressure and supply issues for customers during periods of very high demand – like dry/hot periods. It also, means the company can manage the network better, which should reduce costs and help keep costs down long-term – which helps keep bills down.

Support options

A price cap guarantee where customers moving on to a meter will not pay more than 25% more than the cost of their unmetered bill for 2 years. This will allow time to make changes to the household's water efficiency.

For those with a medical need: A price cap set that guarantees that customers will not have to pay more than they did when unmetered for 24 months. If their metered bill turns out to be less, they pay the lower amount.

For those on low incomes: The Assure tariff where they pay 60% of their bill in year 1 and 40% in year 2. Their circumstances are assessed every 2 years to ensure they remain eligible. They could also qualify for additional help, for example, they may be able to access the Water Company's charitable trust fund to support water efficient white goods.

6: Water transfer options

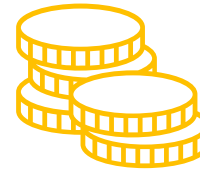
You may recall last year on the online Forum, that we looked at the possibility of water transfers. Water resources may be shared via transfers within a company's supply area, between water companies within the region, or between different regions of the UK. Water transfers are one way of increasing the supply of water in some areas, whilst minimising the impact on the water environment as less water need to be taken from underground aquifers or rivers in the area receiving the transfer.

Is it important to remember water transfers are **NOT** there as way for one water company to make profits for selling water to another region, it is about sharing resources to help meet demand.

The next few slides set out 4 possible water transfer options for your region. We ask that you read them in advance of the group discussion and note down any questions that you would like answered during the session and, even if you are against water transfers, consider which option you think would be best. You will be able to explore each option in more depth during the group discussion and at the end we would like you tell us what which option you prefer and, if it's changed from what you thought when you first saw the options, why?

To help you compare the options we have put together a summary of the cost, environmental risk and degree of resilience (i.e. security of long-term supply) each water transfer option could offer (see opposite).

Remember: all drinking water in the Cambridge region currently comes from underground aquifers whereas the water from any transfer will need to come from surface water, such as a reservoir.



Potential cost of the transfer which would be reflected in customers' bills
Low, Medium or High



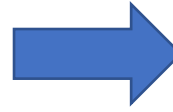
Potential risk of harm to the water environment and carbon emission impacts
Low, Medium or High



The degree of resilience the option offers in terms of ensuring a long term water supply for the region
Low, Medium or High

Option A

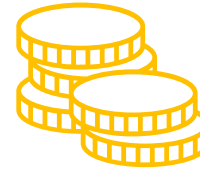
Treated water from
water company A



Cambridge Water
(customers)

Cambridge Water (CW) takes a **treated supply from a neighbouring company** and pay the company the relevant commercial bulk supply costs for the water.

- This would be charged on how much volume of water is taken, so the more customers use, the more Cambridge Water would have to pay the neighbouring company (note that the cost of each litre of water transferred would not change)
- Costs would be set by the Regulator Ofwat based on a set 5 year time period. Costs could be increased or decreased at the start of each of future 5 year planning period.
- Cambridge Water would only own the pipeline from a specific transfer connection point, or points. There would be a commercial agreement in place, however this may not be enough to guarantee that there would be no periods of loss of supply to the transfer point.



Low cost, BUT costs could vary over time

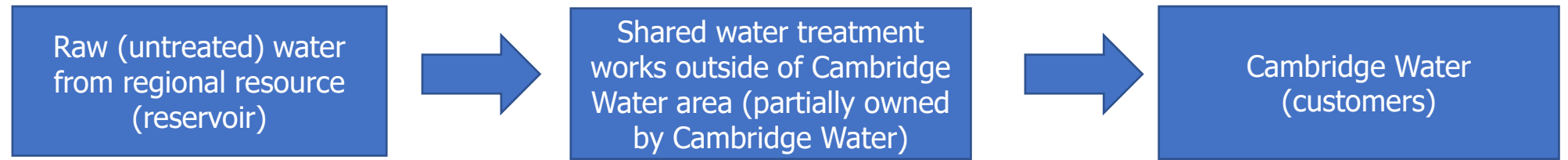


Mostly **outside of Cambridge Water's control**. Reliant on neighbouring water company to minimise environmental impact caused when taking the water and for the transfer processes



This will **depend on agreements** in place, but having multiple transfer connections could increase resilience and protect the transfer in periods of drought

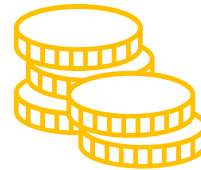
Option B



Raw water from a regional resource (such as a reservoir) is treated at a shared treatment works, between one or more water company. This works would be based outside of the Cambridge Water supply area, but partly owned by the company.

Treated water is transferred from the shared water treatment works into Cambridge Water's area of supply and distributed through existing pipes and networks.

Cambridge Water has a share in the operation of the assets – i.e. the treatment works and pipes that transfer the water.



Low-medium. As this is a shared resource and treatment works Cambridge Water would not be responsible for all the costs involved in their development. They will contribute to the cost of the new regional resource, treatment works and possibly a shared pipe network.

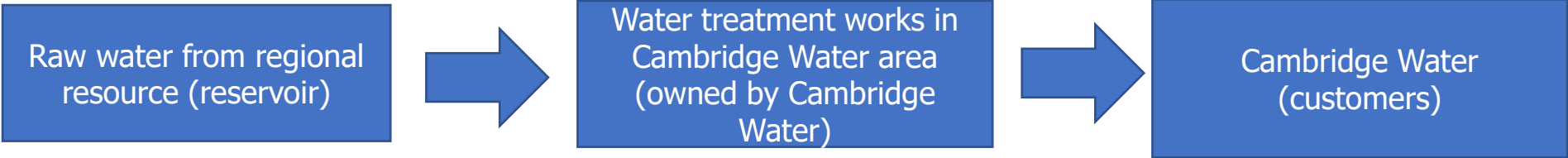


Medium Cambridge Water has a greater level of control over the amount of water taken from the environment and how it is treated than it would in option A, as they are working in partnership with other water companies rather than buying a treated supply. If a reservoir is used, this can help improve bio-diversity and provide a place for recreation, but there would be loss of local habitats.



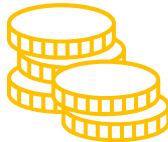
Medium-High degree as Cambridge Water share the assets and can invest in improvements to the infrastructure and pipelines to improve resilience of supplies to customers – such as building two pipelines, in case one fails.

Option C



Cambridge Water receives a **raw (untreated) water transfer from a new regional resource (such as a reservoir) into its supply area and treats the raw water at its own new water treatment works.**

Cambridge Water control the type of treatment (which allows greater control over the appearance and taste and smell of the water) and owns the water treatment works and the pipes that transfer the water.



Medium cost as Cambridge Water will solely rather than jointly own the treatment works and the pipe network. They will contribute to the cost of the new regional resource. But costs less likely to change over time due to Cambridge Water having more control.

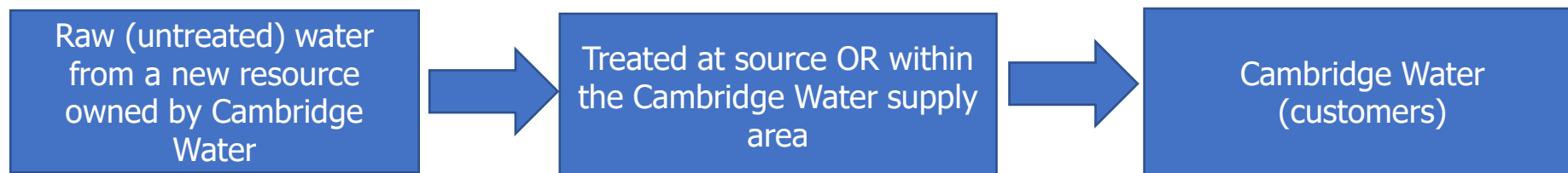


Medium Cambridge Water has the same level of control as option B over the amount of water taken from the environment but having their own water treatment works may mean less distance to pump treated water which helps lower carbon emissions. They also have more control over how the water is treated. If a reservoir is used, this can help improve bio-diversity and provide a place for recreation, but there would be loss of local habitats.



Medium-High degree of resilience, as Cambridge Water control the water treatment works and pipe network and can build in resilience to maintain supplies.

Option D



Cambridge Water develops **a supply outside of its supply area on its own (not a shared resource) and transfers this to its customers**. The source is most likely to be built outside of Cambridge supply area where there is sufficient water available to capture and store, and where there are more suitable sites close to the sources of water to build a reservoir of the size needed. The size of reservoir and available water needs to meet the long-term demand for water, which is not available in the area of supply.

Strictly speaking this is a supply option, but as the source would be some distance away it would require a significant pipeline to transfer the water. This source could be from a new reservoir, a third party supplier, de-salination plant or any other type of supply option. The transfer would also require treatment either at source, or in the Cambridge Water area of supply.



High cost. Cambridge Water would own both the resource and the associated treatment works and pipe network. Costs are higher than they would be when sharing a resource, but Cambridge Water has more control over them.



High Cambridge Water has total control over the amount of water taken from the environment and how it is treated, but is also fully responsible for minimising any environmental impact of building and maintaining the new water source and the pipelines to move the water. If a reservoir is used, this can help improve biodiversity and provide a place for recreation, but there would be loss of local habitats.



High as Cambridge Water would own and operate the reservoir, treatment works, pipe network etc and can invest in improvements to the infrastructure and pipelines improve resilience of supplies to customers.

In summary:

COST INCREASES

A

Low cost, BUT costs could vary over time



Mostly **outside of Cambridge Water's control**. Reliant on neighbouring water company to minimise environmental impact caused when taking the water and for the transfer processes



This will **depend on agreements** in place, but having multiple transfer connections could increase resilience and protect the transfer in periods of drought



B

Low-medium. As this is a shared resource and treatment works Cambridge Water would not be responsible for all the costs involved in their development. They will contribute to the cost of the new regional resource, treatment works and possibly a shared pipe network..



Medium Cambridge Water has a greater level of control over the amount of water taken from the environment and how it is treated than it would in option A, as they are working in partnership with other water companies rather than simply buying a treated supply. Possible reservoir could improve diversity but cause loss of local habitats.



Medium-High degree as Cambridge Water share the assets and can invest in improvements to the infrastructure and pipelines to improve resilience of supplies to customers – such as building two pipelines, in case one fails.



C

Medium cost as Cambridge Water will solely rather than jointly own the treatment works and the pipe network. They will contribute to the cost of the new regional resource. But costs less likely to change over time due to Cambridge Water having more control.



Medium Cambridge Water has the same level of control as option B over the amount of water taken from the environment but having their own water treatment works may mean less distance to pump treated water which helps lower carbon emissions. They also have more control over how the water is treated . Possible reservoir could increase bio-diversity but cause loss of local habitats



Medium-High degree of resilience, as Cambridge Water control the water treatment works and pipe network and can build in resilience to maintain supplies



D

High cost. Cambridge Water would own both the resource and the associated treatment works and pipe network. Costs are higher than the would be when sharing a resource, but Cambridge Water has more control over them.



High Cambridge Water has total control over the amount of water taken from the environment and how it is treated, but is also fully responsible for minimising any environmental impact of building and maintaining the new water source and the pipelines to move the water. If a reservoir is used, this can help improve bio-diversity and provide a place for recreation, but there would be loss of local habitats.

High as Cambridge Water would own and operate the reservoir, treatment works, pipe network etc and can invest in improvements to the infrastructure and pipelines improve resilience of supplies to customers



LEVEL OF CONTROL INCREASES