## South Staffs & Cambridge Water

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

February 2022



Bringing the voices of communities into the heart of organisations



- 1. <u>Background and approach</u>
- 2. The headlines
- 3. <u>Views of metering</u> <u>options</u>
- 4. <u>Views of options for new tariffs/incentives</u>
- 5. <u>Views of water transfer options</u>
- 6. Appendices

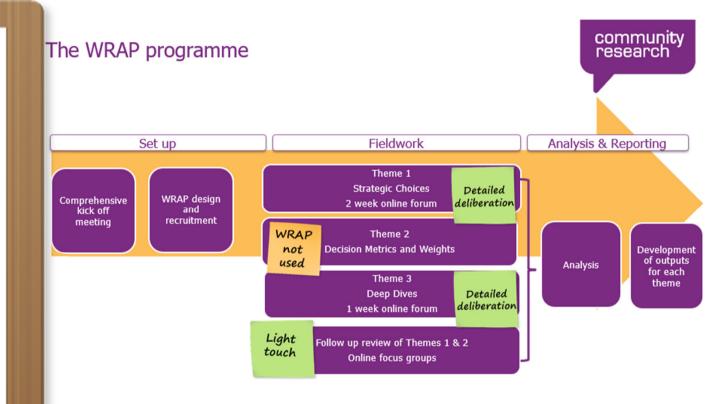


Background and approach

## Project background



- A comprehensive desk research study carried out by Accent/PJM (Dec-Feb 2020) recommended SSC undertake a four themed customer research programme to ensure customers' preferences underpinned the WRMPs in both supply regions
- In June 2021, SSC appointed Community Research to undertake the qualitative elements of the programme and Accent/PJM the quantitative elements







Theme 1 Strategic choices research



Initial online forum to explore household customer, future customer and SME business customer preferences in terms of:

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

To ensure a "golden thread" of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme.

Deep dives

Online forum building on Theme 1 discussions exploring in depth household customer, future customer and SME business customer views on:

- Universal metering
- Water transfers

This deck summarises the findings of follow up online groups exploring the following topics:

- Metering options (covered in both regions)
- New types of tariffs/incentives (SSW only)
- Water transfer options (CAM only)

Online groups





## Our sample

### 11 participants in total took part in the online groups:

	SSW	CW
	6	5
Billpayers	5	4
Future customer	1	-
Small business	-	1

- Mix of ages, gender, household size and SEG of household customers were recruited with some inclusion of customers in vulnerable circumstances
- Participants were chosen to broadly represent the range of views on water transfers and AMI metering expressed in the previous research phases



## Views of the research experience



10 participants felt that the experience exceeded their expectations, with one feeling that it met their expectations

As always was very educational.

Lovely to interact with other customers and hear their views. I got a lot of ideas I hadn't thought [of]. Thoroughly enjoyed it

I had some anxieties about the group discussion but I felt really at ease and felt it was really insightful, I like that I got to discuss my take on the different aspects.

All strongly agreed or agreed that:

- they enjoyed the sessions
- they were well organised
- they understood the information provided
- they felt able to have a say

It was really good to have the Cambridge Water representatives in attendance to answer our questions enabling us to make more informed decisions. It was also noticeable that all those attending the session had a very good understanding of the subject and all made significant contributions to the discussion.

I like that this felt a safe environment to confidently share our thoughts and views with everyone's preference considered. It was informative and it was good to have Dan and Nick on hand to answer some of the questions we raised. Overall this was a very well organised and friendly forum.



## Notes on the approach

Please bear in mind this is **qualitative** research:

- Those who participated in this research 'opted in' to the process It could be that those who opted into the process are different in some way than other customers / citizens.
- It is also important to note, whilst polling results have been reported, qualitative research is not intended to be statistically reliable and, as such, does not permit conclusions to be drawn the wider population.
- Quotes have been included to illustrate particular viewpoints. The views expressed do not always represent the views of all those who participated. Cambridge quotes are shown in purple and SSW in yellow.



Small numbers of participants took part

The research was aimed at complementing other research activities and provided depth rather than breadth





## The headlines (golden threads)

#### **Metering options**

- Broad consensus that AMI meters should be introduced
- Benefits in relation to identifying leaks, reducing the impact on the environment and allowing for accurate bills resonated strongly
- Some concerns to be managed and the need for clear, reassuring communication identified

#### **Tariff options**

- On the whole, individual tariffs more appealing than a community tariff <u>but</u> a Community Tariff should be considered if that is the only option available
- Time-based tariff least popular of the individual tariffs as felt to be unworkable and least likely to result in behaviour change as so many water-based activities are anchored to morning routines
- Difficult to choose between tariffs based on usage without knowing more about costs involved. With either option challenges were identified with educating customers about the 'acceptable water usage limit

#### Water transfer options

- Some underlying concerns about water transfers were apparent (as per previous waves of research)
- The option of sharing a regional resource and treatment works was felt to be the most pragmatic approach given cost considerations but some concern about whether this offers sufficient resilience and control in the long term

community research

Transparency and
engagement
to understand
context for and
impact of any
proposed changes

Collective
responsibility in
terms of sharing
assets for water
transfers and
communications
campaigns for AMI
– i.e. in this
together

Key themes

Environmental concerns at the fore of many of the discussions

Concerns about affordability generally and protecting vulnerable customers specifically



Themes are consistent with Theme 1 research, the deep dives and Accent's priority tracker research



# Throughout the discussions, cost was top of mind and strongly influenced views

Detailed costs were given for the introduction of AMR/AMI meters but these weren't available for the tariff and water transfer options – for the latter, an indication of which options were most expensive was given

I think it all comes down to costs. Costs to the consumer and costs to yourselves as to how it's going to affect us in the future.

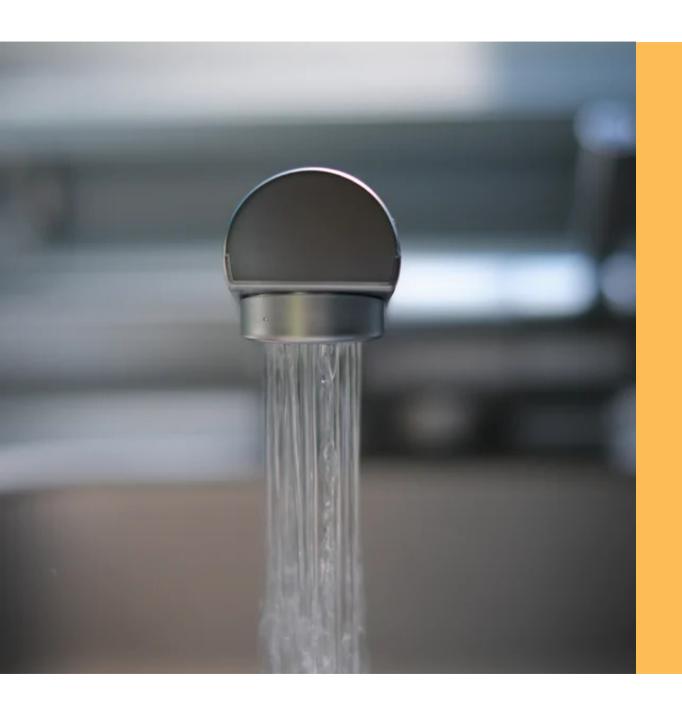
I think another key consideration that everyone that's taking part, that the cost of living is going up so much and it's going up, the food is going up, the electric bills are going up, the water obviously is going up as well, and I think what we've got to bear in mind is, if we're going to do anything like that, or had a smart meter which we all love and we all want and

stuff like that, but the difference is, is that going to make a change in terms of the pricing of the water, because we've got a smart meter or an AMI, is that going to increase the price quite a lot for the consumer or is it just going to be pennies?

We talk about low, medium and high costs [for water transfers], what is the difference between medium and high costs? Are we talking £10 million or are we talking like £1 million because £1 million isn't a huge amount but £10 Million is massive...

I'd be a bit worried in case my bills went up, and also at the moment I have a fixed amount every month so I can budget. And with water you can't shop around. So, you're stuck with the company you've got. So, I'd be a bit more concerned about if it would cost me more being on my own.





Views on metering options –

South Staffs Water and Cambridge Water participants

## Metering options



#### **Context**

Cambridge and South Staffs Water have recently been classed as water stressed and can now consider bringing in universal metering. The company would like to build on the response from earlier research phases to different types of digital meters.

#### **Objectives**

- Being clear on what smart metering functionality customers actually want.
- Exploring language to help underpin business decision to make investment into AMR or AMI.

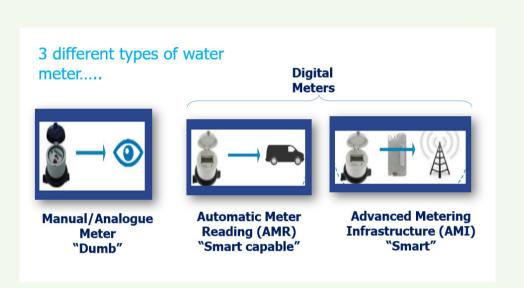
#### Process / approach

Participants were asked to describe smart meters in their own words and give their initial views prior to any further information provision.

The different types of water meter were then described, followed by a discussion about perceived benefits.

Some qualitative polling was conducted with participants asked to identify the top 3 benefits of AMI meters.

Finally, in small break out sessions, participants were given the task of summarising the key drivers for and against the rollout of AMI.





### Behind the headlines





#### Surprises / learning:

Unaware of the proportion of leaks which are on customers' property.

That there is only a small price differential between roll out of AMR (£3.50 per year) and roll out of AMI metering (£4.20 per year) by 2040.



#### Thoughts / justifications

Cost was a prevalent consideration – once they were aware of the small additional costs of AMI as opposed to AMR, there was a strong preference for AMI.

Belief that having real time information would change behaviours (as it has for those with smart energy meters).

Frequent mentions of the positive impact on the environment.

The need to educate and inform consumers about the change to smart meters was highlighted.



#### **Caveats / limitations**

Concern about the potential impact of changes on vulnerable consumers.

One Cambridge participant was very skeptical about the reasons for change – her emotional response needs to be factored into any communications about the introduction of AMI.

There may be a difference between claimed and actual behaviour change as a result of smart metering. People find it notoriously difficult to predict how they will behave in the future.





# When asked to describe smart meters, participants naturally talked about the associated benefits

- Referred to as 'intelligent technology'
- Provides information at your 'fingertips'
- Has potential for educating about behaviour – gives granular information
- Provides accurate billing and can be used as a budgeting tool

More accurate information, I think also it can educate as well, people and business as well, with friends and stuff

It's a great tool to understand if you're on a budget or kind of living with things, to kind of understand exactly where you are in the cycle. So, I look at it quite a lot and midway through the month, and every week. We kind of try to compare to see how much gas and electricity we are using.

It kind of raises my awareness and reminds me to be more efficient and you know, to turn things off when I'm not using it. It's just there in front of you so you don't have to wait until your bill comes.

You're seeing it step by step as it happens

It's something that gives me information there and then that I can for example, with the utility electricity, meters we can see when we turn lights and TVs and bits and pieces off which is a great educational tool for the children as well, it's where they can see, and they like to try and keep us within the green tick and the green area on the graph as well

I would say the same [as others in the group] other than perhaps knowing what exactly is using more water. So you're aware if you're having too many baths or what not





# Broad consensus that AMI meters should be fitted asap but some questions to be answered

The response to AMI in the groups was more positive than in the deep dives BUT the subject was introduced in a different way so it is not comparable

In the deep dives, participants were asked to rank metering rollouts which prioritised different elements. AMI was ranked bottom but this was against rollouts which focussed on cost, minimising demand and customer requests etc. In fact, all of these priorities were evident in this research phase (and some of them influenced the favourable response to AMI).

#### AMI should be introduced:

Participants were very surprised at the difference in cost between the implementation of AMI or AMR. It was perceived as minimal (even for those on low incomes)

It makes sense to introduce the most advanced technology and future proof the system

The functionality and diverse benefits of AMI strongly appealed – participants spontaneously identify numerous benefits.

#### **Concerns about AMI**

Will the technology work (for individuals and rural communities)? and what happens if it goes wrong?

Will consumers be able to switch back to dumb meters if they are not happy?

What data will be collected and are there ulterior motives for its introduction i.e. will prices increase?

Will being able to see use in real-time be stressful for those who are struggling with costs?

Will staff lose their jobs if manual readings are no longer required?





## In their own words – views on AMI

I quite like the idea of it really to be honest. I think you get more accurate readings, I think our behaviours will change. Like you said there, with people watering gardens and stuff, when you brush your teeth. I think it would also help the environment and stuff like that as well. Again, with companies as well, knowing what sort of water we're wasting, if we're wasting too much. Again, I know a lot of time and effort goes into the habitat as well around where we live as well, so that will be good, with the reservoirs and stuff like that, I just think it will be a positive move really.

I think smart meters are a way of just taking people away and making it all self-sufficient. So, I'm a bit cynical about them. And I want to know what the data usage would be particularly useful for water. What exactly is the information being collected?....
Because water is a natural product that we all have a given human right to have. And gas and electricity isn't necessarily but water is, you need water to live, and I just don't like being monitored on water usage.....I bet the problem with the smart meter, I'd put money on it, it won't be that your bills will be going down. You'll be paying the price for it somewhere along the line.

My concern if you went with AMR and continued to roll them out, is that at some stage in the future you are very likely to go down the AMI route. So money that is being spent out rolling out AMRs could be used actually to get the actual AMIs done sooner.

All the prices are going up, you talk about energy bills, you talk about prices going up, the water prices have gone up, electricity so, if there's no control, you are just going to keep doing what you've always done. There's no way of managing your expense or thinking oh, I need to think differently. Or anything about the environment, so for me it's important and like I said I've got a big family it's really important to think about ways of saving money.

The only concern I have with it is that someone could get very worried about how much water they are using and what they are going to be charged to their detriment of how much water they use, if you get what I mean. Because like with the gas and electric a lot of people are scared to turn on appliances and use things because they can see that dial spinning and it going into the red, and they are worried about what they are using I just don't want it to cause anybody to use that much less water that they are scared to use it.





In terms of benefits of AMI, messages relating to leakage, environmental impact and accuracy of billing resonated particularly strongly

Quicker customer side leak/wastage detection Better and quicker identification of leakage was perceived as a key benefit of AMI – this was largely in relation to customers but also it was also highlighted in terms of the benefit to the company. One participant had had direct experience of a leak on his property but it also resonated strongly with those without direct experience. Participants wanted to know what proportion of leaks are on customers' property compared to the network as a whole when assessing the benefits.

I think just spotting a problem as soon as possible, whether it's in the household or the area. I think that's one of the best ways to reduce water being wasted if it's either leaking pipes or what not. And just being able to keep a constant accurate view of your bill as well. But I think the biggest thing is noticing the leaks.

Reduced environmental impact The environmental benefits of AMI meters were raised spontaneously and early in the discussions. They were linked to better pinpointing of leaks and changing consumer behaviour.

Overall it would probably be if people could see what they are using it would maybe consciously kind of stop them wasting water, so then overall we would save water for future generations

The ability to target water efficiency campaigns was highlighted by one participant but gave the impression to another that they would be 'pestered' by the company

Accurate billing

Accuracy of billing was felt to be important as cost and affordability was an undercurrent throughout all the discussions. This was also associated with fairness.

Allowing customers more control and providing customers with regular information were also felt to be positive messages





## Most felt that their behaviours in terms of water use would change as a result of having an AMI meter

Those with an energy smart meter had changed their behaviours as a result and felt that a smart water meter would have the same impact

felt that they would be nudged to change behaviour, particularly driven by environmental factors and cost

Those without a smart energy meter

Only one participant was sceptical about the possibility of behaviour change being prompted by a smart water meter

So, prior to having a smart meter for my electric and gas, again, I didn't have any idea how much I was spending until my bill came along, and then last year I spoke to my electricity supplier, they've put a smart meter in and I'm really conscious now, I feel like every week or two I just go and check how much gas and electricity we are spending.

I mean I spend ages watering all the baskets and watering plants, and watering the lawn, I think it would certainly make me stop doing that to be honest with you.

Well, in fairness, if everyone wants to protect the environment, we should be doing it now anyway. I personally feel there's enough information around...it's a fact we haven't got enough water, we've all got to cut back, completely cut back and it's got to be a life=style and not necessarily a little dial going around telling you to do it, you should be thinking about it all the time anyway

My water bills are very low, I don't have to pay much for it because I'm only paying for the water coming in. It's still having an 8year-old son who keeps reminding me about the environment and leaving the planet for him to move in, makes us think about things. And having a meter that would allow me to change my lifestyle more than I have possibly. somewhere along the line

A similar proportion of participants had an energy smart meter as per the deep dives research. Group participants were more optimistic generally about behaviour change than in the deep dives...and it should also be noted that claimed behaviour can be very different to actual behaviours





## Call for in-home display and online information



When asked to describe the features of AMI many participants talked about customers having information in real time – participants, therefore, believed that there should be some form of accessible in-home display as is the case for energy smart meters

Online information

Some participants also felt that online information about their consumption, giving them data and charts on their use and tips on how they could save water, would be useful

I think it brings it to the forefront of people's awareness and attention. When your gas and electricity is in the meter cupboard and your water is on a meter outside or under the sink, you don't really think about it, it just happens. Whereas when there's something physical in front of you and you can see the dials ticking round or the graph going up and down, it makes you think a little bit more about what you're doing.

Yes, if it's displayed in your home, it's staring you in the face, isn't it?
Not only today but every day. If it's on a portal I'm not gonna be going on to the portal every day to see what I'm using

I think it would be a good idea to get a portal where you could go into it monthly, and it sort of tells you where your trends are and maybe how to do your behavioural changes to save water and stuff like that. I think you would have a mixture of both really, so you could have a portal where you go into it each month. But also visual where you can have a look at it





## In their own words – why AMI should be introduced

Participants were asked to work in small groups to come up with the key messages that they would use to 'sell' AMI to other consumers

Water is a finite resource, so we need to act now to protect the supply for future generations and if we continue to use water as we are there's going to be serious shortages and the potential for supply interruptions in the future. It will give fairer more accurate bills based on usage rather than property type and make people more aware of how much water they are using. Education is key, it needs to start in schools.

We never came up with a slogan. But something around save money, save the environment, save water headlines, but talking also about the progressive nature of the technology and the ability to manage your own usage. We felt the main focus was on the technology side with the AMIs, and that was much more progressive and potentially where everybody would want to be at an end point.

So we came up with this kind of thing like a sentence that to sell the AMI thing, would be like a smart tool that will help the environment and the future of our children by conserving water consumption across all communities working together.

They will give you more accurate measurements with reading the meters, obviously we can get micro measurements because they will be taken more often. We've then got it's better for the environment due to the fact obviously if there was a major link within Colwood, which is the area we are in, it would help us find out how much water is coming in and out and it will be able to help with the pipes needing to be changed if a burst happens. Better for saving water and saving money ourselves due to the fact that we will be able to manage our water and be able to see how much we are using and where we are using it, and how we can reduce it. And then I think it would also be another one because it would be better for preparing the future so like all the young kids now will be able to learn about it, so understand how it all works when they are old.





## In their own words – why AMI should not be introduced

Participants were asked to work in small groups to come up with reasons why AMI should not be introduced. They found this exercise more difficult generally.

I think we struggled to come up with an argument against to be honest, but the main things we cam up with was, if it's not broke why change it, I'm scared it will cost me more, I'm stuck with my supplier it's not like the gas and electric where I can shop around, so I'm scared costs can spiral.

From a point of view of ease and getting them out, they [AMR] are the better one and from a technology point of view we were not sure whether or not rurally it would be better to stay with the AMRs because they might be easier to get out, because the technology is great, but you've got to have all of these Wi-Fi signal bases and all the rest of it, so would it then be better? And also the more technology the more things go wrong. So, would it be better to stay with a more basic model and get everybody on the basic model.

Not everyone will want to pay for it, even though it might be only small, not everyone will want to go out and actually pay for it, just because they don't want to for some reason. We've then got people on like the changes, so obviously some people go with the theme of 'if it's not broken why fix it?' If the old methods working why change to something that could be prone to breaking. Just the fact that technology it can be very complex, like the towers could get taken down, devices could have an issue with them, or it can't pick up the data which we want the information going back and forth, so people might find that more difficult. And then the main one that we looked at was the people would lose a lot of jobs, obviously I know a lot of people are going around in the statement reading all of the different data and everything, but if we go all into technology where one person has to read the data, or a multiple big room has to read the data a lot of people will lose their jobs because they won't have to go out and driver around to collect all the data.





Views on new types of tariffs/incentives –

South Staffs Water participants only

### Behind the headlines





### **Surprises / learning:**

There was little understanding of what 80l/p/d looks like or translates to.

When given more information about what 80l/p/d could look like (number of flushes, showers etc) some felt that it could be quite limiting/restrictive. Felt to be a relatively low target compared to current water use.



### Thoughts / justifications

Most were open to universal metering as the fairest way to pay and there is interest in being rewarded (via a tariff) for using less water.

A community tariff does have appeal but most (4/6) preferred an individual tariff. This reflects general concerns about the cost of living.



#### **Caveats / limitations**

Any change to the proposed tariffs would be heavily dependent on customers understanding the acceptable usage limit looks like – this might be not be easy!

Without illustrating costs associated with the different set usage tariffs it was difficult for customers to express a meaningful preference between a tariff based on a set limit versus a tariff based on usage bands – much depended on the amount they would be penalised by if they went above the limit.



## Options for new types of tariffs/incentives



#### **Context**

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.

#### **Objectives**

 Explore high-level principles with customers to build evidence base for Ofwat around changes to tariffs.

#### Process / approach

This topic area was only discussed with participants from SSW as time constraints required prioritisation of discussion areas at the live online group.

A summary of the current charging situation (and associated regulation) was sent to participants in advance of the session.

Participants' views of the current system were explored initially.

The moderator then outlined a number of different options for new types of tariffs, including community based and individual incentives.

This was followed by a discussion about customers' preferences and any associated concerns.



## Option 1 – Community based incentives

The idea is that customers in the region would be awarded an ncentive (such as points) for every litre of water saved by a nousehold 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 ulnerable circumstances, including larger families

nere are several different types of tariffs that could be





# Mixed response to current charging arrangement for water and some appetite for different types of tariffs

- Able to view benefits and limitations of current charging arrangements
  - Seems unfair to the water company who has to charge less in the future for water based on unforeseen circumstances resulting from the pandemic
  - But protects customers as water charges are unlikely to 'spiral out of control'

I would say it's probably unfair on the side of the company that they then have, Covid everyone using so much water, and they have to balance that out and reduce prices etc. So, for their side it's probably unfair and for the consumer it's like safe but fair.

When looking at charging arrangements participants were most concerned about the disparity between metered and unmetered customers rather than the restrictive nature of a 5-year price limit

- There was an appetite for different types of tariffs
  - Some sense that they might be more appealing to young people who are 'less set in their ways' when it comes for paying for water
    - Indeed, the future customer in the group said that different tariffs did appeal

Participants
questioned how
customers will
change behaviour if
they are not all
metered in the first
instance?



## Muted positive response to the concept of a Community tariff

Participants were introduced to the idea 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



Heart says community, head says personal [tariff].

Reactions were broadly positive but questions were raised:

How are households measured/what is the start point from which they would need to reduce consumption?

How can individual households continue to make savings over the long term? Can't keep reducing use of water – there has to be an end point? Is this just a short term tariff?

How do households know what projects they are supporting and how are projects selected? It may be demotivating to reduce water for a community cause they don't believe in

2/6 participants preferred a community tariff to an individual tariff. They were motivated by the idea of giving something back. Even those that preferred individual tariffs, felt that community tariffs were worth exploring if they were the only option on the table





# Queries over the selection of the community project to be supported

Forum members did not express support for a particular type of community project (environment, older people, young people etc) instead they stressed that the projects selected should be determined by local need - and that this would vary by area



Although they understood that customers may be able to vote for the projects they would like to see supported, they assumed that there would be a shortlisting process – and they questioned how that shortlist would be determined i.e. the SSW board, an independent panel, suggestions put forward by customers themselves etc. There was a sense that this process would need to be transparent

Some queried at what point in the process would customers know the community projects they were supporting. A couple suggested that it could be demotivating if they did not agree with the aims of the project/only found out details about the projects after signing up.

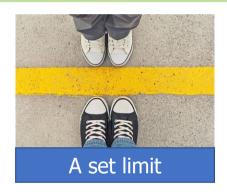
A really positive thing funding community projects and giving back to the community but, if it's a vote system and we put projects forward, that's not to say that project would get funded. So, you could be doing all this saving the water because you really want your local community project to get help, but it's not fair to say that's what would happen.







4/6 participants preferred an individual tariff over community tariffs but found it difficult to identify a clear preference. It depended on how much they would get charged for going over a set limit versus how much they would be charged in each usage band for going over the set limit. They wanted to be able to work out which would make them better off. They also felt that customers needed to be given a choice.



Yes, the other thing that worries me about the set limit is if there's just one charge regardless of how much water you use above the 80 litres, there's no incentive to cut back is there



- Potentially simpler to work out
- Less stressful as only have to worry about going over one limit
- But some see no incentive in trying to keep on saving water once they have exceeded the limit

I just think usage bands are fairer because if somebody uses an extreme amount of water, so they've got hot tubs or something like that, why should I pay the same as them?

- Could be of benefit if they only go over by a small amount assume the lower bands are significantly cheaper than higher bands?
- Seems fair that those who deliberately choose to use the most water (i.e. hot tubs, watering garden) are charged the highest amount





## In their own words

I mean, if there was a big difference between what you're charged per unit between approach A and approach B, obviously that's food for thought. But yes, for me it would be like if there's not much difference then at least I know that I can just use as much over 80 litres, and I'd get the same charge per unit extra. As opposed to it going in steps.

It all depends on the charges doesn't it really, how much are you charged going over option A, the first one, or the incremental one you could be charged a small amount and then it goes higher, something like that. It depends on how much you're charged.

I think it [support options for vulnerable customers] provides assurance to people to be honest who are really concerned about the costs. I think it gives them a bit of reassurance that there is help.

I was just going to say I don't think there's one size fits all so there needs to be options.

I was just going to say, I think people might be more open to it and more favourable well at least I've got a choice. So they are kind of making their own decisions even though it's not their own decision if you know what I mean.

I would probably prefer the set limit, if I've understood it correctly. Because regardless of, if I went over 80 I'd be charged extra per unit, but I could go as much over 80 and I'd still get charged the same amount per unit. Whereas the incremental is if I did 80-90 it would be one charge, 90-100 it would be more.





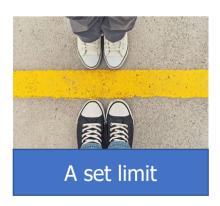
# An acceptable usage limit tariff is difficult to visualise and some concerns over its restrictive nature

For both the set limit tariff and the usage bands tariff, participants were introduced to the concept of an acceptable usage limit.



What does the **the acceptable usage limit** (80l/p/d) look like? None of the forum members could visualise it and one or two were concerned about being set a limit they did not understand

When further information is given about what 80l/p/d could potentially include for an individual, there was some concern that it could be quite restrictive



Furthermore, using 'litres per day' as the form of measurement very much suggests that this would be a daily limit - when an average taken over a month might be more appealing

Even that as an example now makes me think actually would 80 litres be enough?

I work from home now, I wash my hands like 5 or 6 times a day. Go to the toilet more than 4 or 5 times. So yes, it makes you think then that actually 80 litres might not be enough.





## A time-based individual tariff was not popular



Questioned what time of day would be cheapest – but assumed that it was unlikely to be in the morning/day time.





Unlikely to encourage behaviour change

Some questioned how easy it would be to change behaviours with so much water based activities anchored to morning routines?

Also, concerns for those who worked difficult shift patterns Even those most open to the tariff felt that any changes they could make might not be sustainable

Negative impact or other utilities

Pointed out that not putting washing on in the morning was counter-intuitive as they needed daylight to dry the clothes or else they were reliant to on heating / tumble dryers



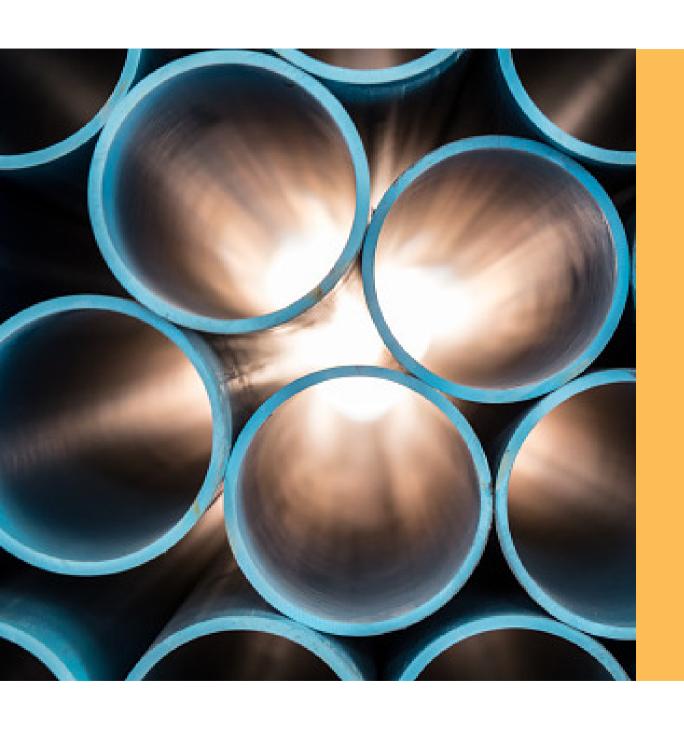
## Time-based tariff – In their own words

I'm guessing with that as well the most expensive time would be during the mornings just because rush-hour sort of thing, 7 o'clock,/8 o'clock, when people are up doing their showing and stuff like that. So that's when really you need to have the washing and stuff like that so really, I don't think my habits would change really.

The time one wouldn't be right because people work different shifts, different hours, I mean you can't wait to go to the loo until at night, can you? You've got to go when you've got to go. So, the time one really worries me.

I would imagine the cheapest time is going to be after say 7pm or 8pm at night. So you're doing 2 or 3 loads of washing, you either do it first thing in the morning so you can put it out and dry couldn't you, rather than leave it overnight I would imagine. That's one of the reasons why I don't think it's workable.





Views on water transfer options -

Cambridge Water participants only

## Water transfer options



#### **Context**

Water transfers could potentially help address supply issues. With Water Resources East considering possible water transfers to Cambridge Water in partnership with Anglian Water.

### **Objectives**

 Understand if there is a clear customer preference for a particular type of transfer bearing in mind issues relating to cost, control and resilience.

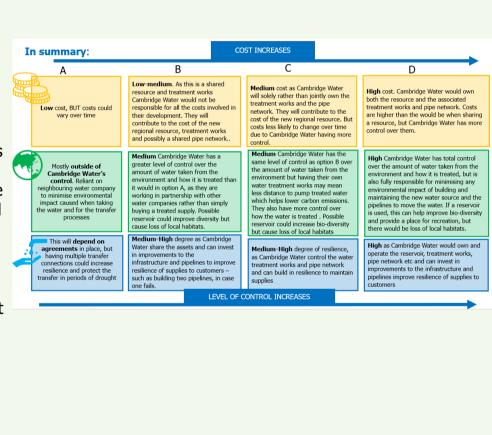
#### Process / approach

This topic area was only discussed with participants from CW as time constraints required prioritisation of discussion areas at the live online group and water transfers were felt to be a more pertinent for the Cambridge group.

A summary of possible water transfer options was sent to participants in advance of the session. This outlined options and gave some information on cost, control of environmental impact and resilience.

Some context in terms of the need for additional supply options was provided, followed by an initial discussion of participant preferences.

Each of the options was then discussed in turn, with participants given the opportunity to ask detailed questions to a SSC team member.





### Behind the headlines







Some misapprehensions about how the costs would be applied and frequency of use – some presumption that water transfers would just be used at times of high demand and paid for only at those times.

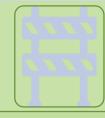
Some uncertainty about the length of time each option would take to come on stream.



## Thoughts / justifications

Water transfers immediately associated with the transfer of treated water from another water company on a commercial bulk supply basis (Option A as described to participants).

Transfers were, therefore, initially felt to be a stop gap or short-term fix rather than associated with a planned supply option.



### **Caveats / limitations**

Concern about reliance on another water company – will other companies have available resources for them?

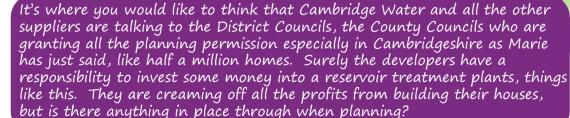
Concern about the environment both in terms of construction of pipelines and also transfer of non-native species

Has the company done everything else in its power to avoid needing this option? i.e. considered water recycling options and used its influence to try to halt or reduce the amount of development in the area

Will the water quality and taste be affected?

Will customers be told that water transfers will be happening?

Views and concerns mirror those expressed in the Theme 1 research and deep dives







# Treated water transfers (Option A) felt to be a temporary measure

#### **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



Low as 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  Concern about reliability of supply of water from another company

- Felt strongly that this is a temporary, stop-gap measure
- Some concerns about environmental control

However, it was spontaneously identified and accepted that this type of transfer might need to happen whilst longer term options

were put in place

I feel it's putting a plaster over like a leak, for a better word...we need to look and invest in something that's more sustainable because other areas, populations can increase and if an area that we're looking to transfer into the Cambridge region have an increased usage, is there a risk that they won't be able to provide water for us?

Back in the initial discussions I was really worried if we relied on this as a potential [option] to find out the suppliers that were available when we need it most. I don't know what data there is around the potential suppliers on the amount of water they do have available, what their situation has been in the past when there has been droughts.

From the environmental side obviously there's no control on that from the Cambridge side. Because everything is done by the supplier, but presumably there are quite stringent regulations on damage to the environment by taking water already?





## The development of shared assets (Option B) was preferred by

most

#### **Option B**

Raw (untreated) water from regional resource (reservoir)



Shared water treatment works outside of Cambridge Water area (partially owned by Cambridge Water)



Cambridge Water (customers)

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.

 This option was viewed as providing sufficient security and control whilst being lower cost than some of the other options.

However, there were some concerns whether it would be sufficient to provide for future needs

Option C was felt to be a similar option to B – the difference being that CW fully owns the treatment works rather than sharing. Participants felt that the lower costs of sharing outweighed the control advantage.

I think for me, looking at this model although obviously it will be a bit more expensive than model 1 but it looks like a more sustainable and a long-term plan in terms of one, Cambridge Water will have more control of it but also...in terms of the pipes and in terms of it will be a long-term plan as opposed to the first one.

Option B for me personally seems a lot better than option A. My concern would be sharing it with other suppliers is the future proof if this is built in 10-15 years' time and water usage has increased and the providers that are sharing it are drawing more water out of it, in 20 years' time, are we going to need to build another one to continue having enough water, or is it better to invest more now to have our own one in Cambridge Water that will sustain us for the next 30-40 years.

I think B is more yes, more of a realistic [option] for now, what with everything we are going through at the moment with Covid and yes, I think an extreme cost is going to be really difficult for people at the moment to cope with.





# Fully owned assets (Option D) felt to be ideal but perceived as being too costly currently

**Option D** 

Raw (untreated) water from a new resource owned by Cambridge Water





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 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 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.

 One participant felt strongly that Option D was preferable in order to future proof the strategy

This option also resonated with others but they flagged concerns about costs in the current climate and the time it would take to get up and running

Although participants were told about estimated timelines, they still assumed that this option would take the longest time to implement of all the available options. Participants flagged the tension between the need to act quickly and the need to ensure that the best option is chosen even if it takes longer.

I think without doubt it would have to be D. I think it's a false economy to not because if you don't do that you could potentially see the costs of the water going up because you're not in control of it. So, you might save initially but then the costs of that supply coming in from somewhere else. The other thing is, it's going to take so many years to do anyway we've got to crack on with it now because it's going to be too late if we don't. And if everybody gets the water meters in and they can see their consumption, then everyone else says they can reduce their usage down so they should be able to save money on bills anyway.

One of the issues I thought about was if you went for option D, what are the forecasts for the water supply up until that would be finished? Are there going to be issues before that so you would need to bring in another option anyway in the shorter term?





Appendices



## Focus group participant profile

	CCVV	CAMPO
	SSW	CAMBS
Total	6	5
SME owners	-	1
Future bill payers	1	-
Bill-payers (jointly or solely	5	4
responsible for bill)		
Gender		
Male	3	3
Female	3	2
Age		
18 to 24	1	-
25 to 39	1	2
40 to 54	3	1
55 to 70	1	2
70+	-	-
Children at home		
Children in household	2	3
No children in household	4	2
Ethnicity		
BAME Background	1	1

	SSW	CAMBS
Socio Economic Group		
ABC1	3	3
C2DE	3	2
Water meter in home		
Yes	3	3
No	3	2
Vulnerable circumstances		
Vulnerability	1	2



## **Evaluation survey**







	Better than expected	As expected	Worse than expected
Overall experience	6	-	-

	Strongly agree	Agree	Disagree	Strongly disagree
I enjoyed taking part	5	1	-	-
The session was well organised	4	2	-	-
I was able to have a say	5	1	-	-
I understood the information provided	5	1	-	-

	Better than expected	As expected	Worse than expected
Overall experience	4	1	-

	Strongly agree	Agree	Disagree	Strongly disagree
I enjoyed taking part	4	1	-	-
The session was well organised	5	-	-	-
I was able to have a say	3	2	-	-
I understood the information provided	4	1	-	-





## Stimulus material

Topic	Stimulus
Overall agenda	Final agenda
Metering	Types of water Benefits of AMI meter meters
Tariffs	Pricing context Tariff options
Water transfers	Water transfer options

