

A photograph of a woman and two children. The woman is in the background, looking down at a glass of water. In the foreground, a young girl is holding the glass with both hands and drinking. To the right, a younger child is looking towards the camera. The background is softly blurred, suggesting an indoor setting.

# Shadow Metering Research

A WaterTalk research report prepared for United Utilities  
December 2020

# Background, approach and summary

# Research background

United Utilities have been promoting water meters in the hope of encouraging more customers to switch from a fixed bill, to one based on actual water usage. Having more customers on water meters will give United Utilities greater visibility of network usage and demand to better plan water resources in the future, and the ability to identify customer-side leaks to tackle wastage more effectively.

Uptake of water meters is reaching a plateau, so United Utilities is now seeking to roll out the installation of 'shadow meters' at all unmeasured properties from March 2021 which will need to be communicated to customers. However, the communications need to contain messages relating to several elements of the shadow meter proposition.

Therefore it is crucial to understand what customers think of the proposition and give them a central role in development of the comms. This is key for United Utilities to be able to anticipate and mitigate against any concerns or complaints raised by customers.

# Research objectives and approach

A draft, high-level communication was developed to outline the main elements of the shadow meter rollout, and this was used as stimulus in the group sessions.

## Research was required in order to understand the following:

- Reactions to the key elements of the shadow metering proposition
- Importance of key messages for customers and priorities
- Concerns and how UU can mitigate against these
- How UU should be communicating this message to unmeasured customers
- Preferred formats for communicating this message

### 1) What is United Utilities doing?

We're going to be fitting new meters to our water pipes in your road. These meters will help us to better monitor the amount of water being used in your area. This will allow us to spot potential leaks much quicker and even identify if you have a leak on your own plumbing which you may not even be aware of.

We'll be in your road fitting these new meters on [DATE AND TIME]. We'll be working in the footpath outside your home and may need to do some digging but we'll keep any disruption to an absolute minimum. You don't need to be at home while we do this work and we'll pop a card through your door to let you know if we need to switch off your water for a short time.

### 2) Making sure you have the cheapest water bill

Once we've installed the meter, we'll then be able to tell you if you would make a saving on your existing bills based on the amount of water you use. We know that many of our customers would be better off with a meter but are put off applying as they're not sure if they would make a saving compared to their existing fixed bill.

Going forward, every time we send you a bill we'll now show you what you would pay based on your meter reading. We'll compare this against your current fixed bill and if you would have paid less with a meter then we'll charge you the lower amount. This is our 'Lowest Bill Guarantee'. It will run for two years, and at the end of this period, you can choose whether to switch to a metered tariff for good, or remain on your original tariff.

### 3) Replacing lead pipes for free

While we are fitting these meters, if your property has a lead supply pipe, we'll replace your water supply pipe for free when we fit your meter, or give you a voucher for 65 per cent of the cost if you wish to arrange this yourself. This voucher will be valid for two years. There may need to be some digging work at your property.


### 4) What will happen if I move out?

If you move out of the property, and have not switched over to a metered tariff (or are still under the terms of the Lowest Bill Guarantee two year period), then whomever moves into the property will then be subject to a metered tariff.

## What we did:

-  **Four x 75 minute online discussion groups with customers from the WaterTalk community**

- **The groups took place between Tuesday 17th and Thursday 19<sup>th</sup> November 2020**

-  **1. Open to meters, low usage\***
- **2. Opposed to meters, low usage**
- **3. Open to meters, high usage**
- **4. Opposed to meters, low usage**

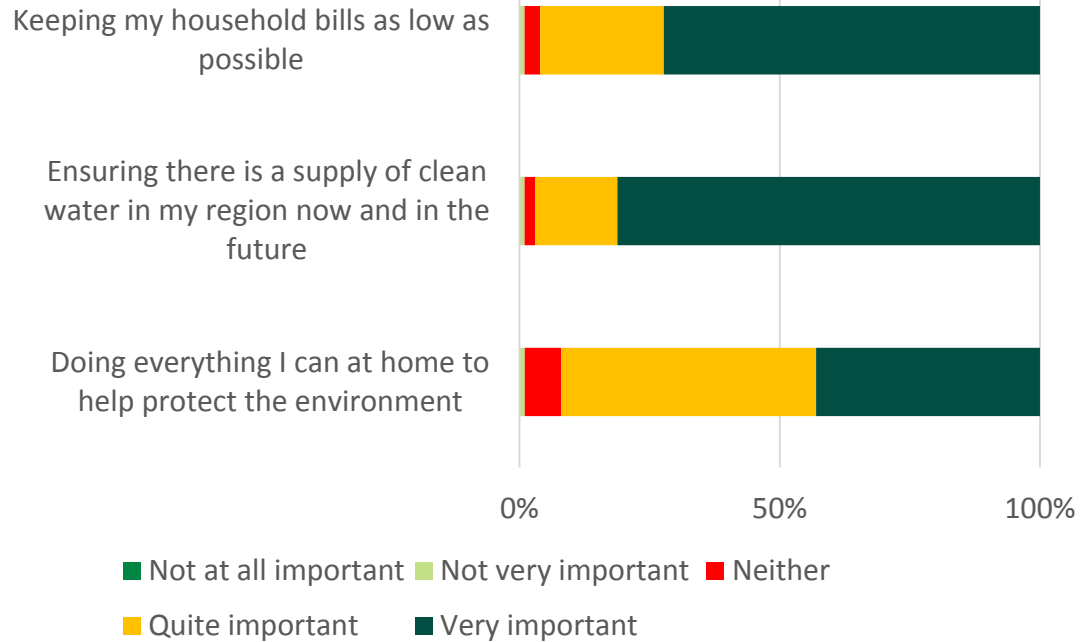
Usage was determined by number of residents, vehicles and the presence of an actively maintained garden

# Customer profiles – who applied to be part of the research?



**122** Customers registered their interest to be part of the research with varying attitudes to water meters

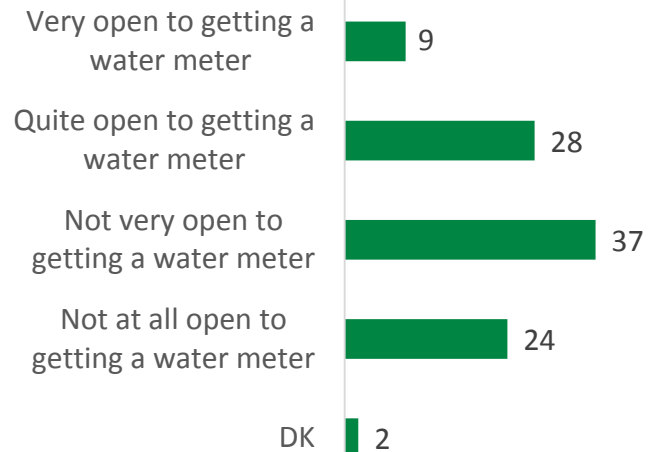
The majority believe that issues relating to water meters are important or very important



63% have a garden that they regularly maintain



Have a least one car or motor vehicle



18% have or have previously had a lead pipe in their property, but 68% do not know if they do or not



# Executive overview

# Executive overview

## 1

### Barriers to water meters largely fit into four areas

- Logistical – Issue with the building or unable to get a water meter fitted at a convenient time
- Knowledge - Lack of understanding of how they work
- Financial - Concerns that having a water meter will impact negatively on their bills or house value
- Ideological - It is their choice and strongly believe United Utilities have an ulterior motive for wanted to install them

## 2

### Those who are open to water meters are aware of the potential benefits

- They focus people on being more conscious of the water they use
- ‘Paying for what you use’ is a fairer system
- Possible to save money
- Lower water use and wastage makes for better environmental outcomes
- Being able to measure water use can help identify issues and ensure UU is better prepared for the future

## 3

### Those who are opposed to water meters believe that they will be disadvantaged if they have one installed

- The information collected will eventually be used to justify larger bills
- The United Utilities calculator predicted that they would pay more with a water meter
- Some just like having a fixed bill
- Those more ideologically opposed feel that they would lose some control if they moved to a water meter

# Executive overview

4

There is some work to do on the messaging, with a number of concerns highlighted by customers

- The current message does not make it clear that the water meters will be monitoring usage per household
- Being able to compare prices for two years appeals to most and Lowest Bill Guarantee is an appealing proposition
- Replacing lead pipes is a positive gesture although more details are required
- The message around new residents being moved onto a meter is poorly received

5

To improve the communications and help those most opposed accept the changes, the message should be more direct and transparent

Following the structure of Problem, Solution, Benefit

6

Customers will require information to be available in a number of formats in order to ensure that they get the level of detail they require

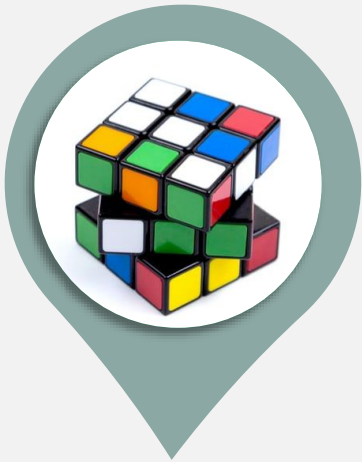
- A mix of direct mail and online resources are requested



# Barriers to water meters

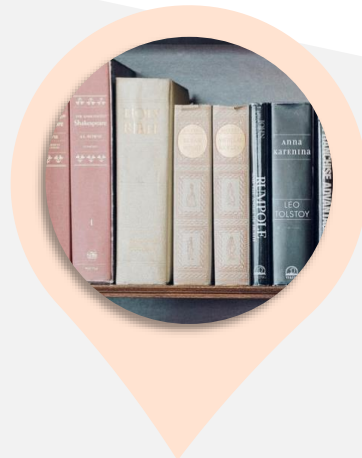
# Barriers to water meters largely fit into four categories...

*Open to getting a meter to opposed*



## Logistical

Issue with the building or unable to get a water meter fitted at a convenient time



## Knowledge

Lack of understanding of how they work (e.g. believe that they have to read the meter on a regular basis)



## Financial

Concerns that having a water meter will increase bills or dislike the idea of a varied bill even if it means paying less



## Ideological

Strongly believe it is their choice, that it is unfair on larger households and that it is a way for United Utilities to increase profits

# People with logistical and knowledge barriers are more open to getting a water meter and can see the benefits

## Perceived benefits of water meters

- Meters can focus people on being more conscious of the water they use
- ‘Paying for what you use’ is a fairer system
- Many ‘open’ customers are aware that meters can save money for those that are careful about what they use
- Lower water use and wastage makes for better environmental outcomes
- Being able to measure water use can help identify issues and ensure UU is better prepared for the future

## Customers who are open to meters if obstacles could be removed

### Logistical Barrier

**Kevin** lives by himself and runs his business from home.

He doesn't feel that his water use is that high, and he has applied for a meter in the past. However, due to the pipework in his home, UU is unable to fit one

*On a positive note, I got switched to the single person occupancy standard rate, which was about half what I was paying on the rateable value, so that was fine by me. **55+, Open***

### Knowledge Barrier

**Craig** lives with his wife and has mobility issues.

He doesn't understand how water meters work and thinks it might be a bit like an energy meter that he has to read. With mobility issues he's concerned that he might not be able to access it

*My thing is, I'm leaning towards water meter and I want to know, A, where it would be put and B, how accessible it was. Who gets to read it? **55+ Open***

# People with financial or ideological barriers are much harder to persuade

## Perceived disadvantages of water meters

- Many believe that a water meter would ultimately lead to higher bills and would give United Utilities more opportunities to increase their bills
- Some have used United Utilities calculators that said they would pay more with a water meter or have friends/family who have had their bill increase after moving to a water meter
- Those on low incomes like having a fixed bill as it makes it easier to plan their outgoings – even if they pay more
- Those more ideologically opposed feel that they would lose some control if they moved to a water meter – they currently have the choice to have a water meter but they won't have the choice to move back to a fixed fee

## Customers who are opposed to water meters have strong views and beliefs

Financial

**Laura** lives in a bungalow with four children, two dogs and a 'massive garden!'

One of Laura's friends has a meter and tells her she has to be very careful what she uses; she has also heard a similar story from one of her clients, and so is not keen to increase her bills

*Well, I think people like to know where they are every month, without thinking well it could be this, it could be that and I just think it scares people.*

**25-34, Opposed**

Ideological

**Russ** lives in a three bed semi-detached house with his wife and daughter.

He feels that he uses too much water with baths, showers etc. to make a meter worthwhile, but is otherwise water conscious. He is very suspicious of UU's motives in installing meters.

*This brings out the cynic in me. Metering by the back door. One of the reasons I want to remain meter free, it gives potential value to a family buying my house if I sell it.*

**25-34, Opposed**

# In order to convince more that water meters are beneficial – a number of myths and misinformation needs to be addressed

Those who are most opposed to water meters have a negative view of United Utilities

They believe that United Utilities have ulterior motives for ‘pushing’ water meters on households and do not believe that they have the customer’s best interest at heart

*They've got shareholders to keep happy. Do you think if everybody halved their water use over night and their bills dropped by 50% that United Utilities would pat us all on the back and say, 'Well done, chaps?' No, they'd have to find that money from somewhere else **25-34 Opposed***

## Water Meters will boost UU’s profits

Many believe that they will pay more on a water meter and it will force them to be much more frugal with their water use

## House value will be impacted

There is a general belief that a house with a water meter will be worth less than one without  
Being shown data that indicated that water meters are quite common did not change the minds of those who most strongly believe this

## Future homeowners will be negatively impacted

Not wanting to impact future residents of the address with a decision they have made (i.e. any future residents will automatically be charged via the water meter)

## Will allow United Utilities to raise prices for peak water use

Some believe that United Utilities want to collect data in order to be able to work out how to make more money – e.g. charge people more for using water at peak times

# To change perceptions around water meters, information and support needs to address these four main barriers

Open to getting a meter  
to not open

## Logistical Barriers

Although this group is likely to be open to getting a water meter (and may have tried) the logistical barriers are probably unresolvable. The Assessed Household Charge seems to be a satisfactory outcome

## Knowledge Barriers

This group are open to getting water meters but will need some additional information about what it would mean for them – how does a water meter work and how is information sent to United Utilities

## Financial Barriers

This group is more difficult to convince – being shown strong evidence that they can save money would be motivating but there is a fear that having a water meter will give United Utilities more opportunities to give them a large bill

## Ideological Barriers

This is the hardest group to convince as they have very strong opinions and beliefs about water meters and/or United Utilities. They are unlikely to believe facts or statistics (such as water meters do not impact house prices) and are more likely to listen to rumours and conspiracy theories from more unreliable sources

# The Shadow Metering proposal

# The messaging stimulus as tested with customers

The following messaging was tested in the sessions. Over the course of the discussion, messages one through four were revealed in turn.

## 1) What is United Utilities doing?

We're going to be fitting new meters to our water pipes in your road. These meters will help us to better monitor the amount of water being used in your area. This will allow us to spot potential leaks much quicker and even identify if you have a leak on your own plumbing which you may not even be aware of.

We'll be in your road fitting these new meters on [DATE AND TIME]. We'll be working in the footpath outside your home and may need to do some digging but we'll keep any disruption to an absolute minimum. You don't need to be at home while we do this work and we'll pop a card through your door to let you know if we need to switch off your water for a short time.

## 2) Making sure you have the cheapest water bill

Once we've installed the meter, we'll then be able to tell you if you would make a saving on your existing bills based on the amount of water you use. We know that many of our customers would be better off with a meter but are put off applying as they're not sure if they would make a saving compared to their existing fixed bill.

Going forward, every time we send you a bill we'll now show you what you would pay based on your meter reading. We'll compare this against your current fixed bill and if you would have paid less with a meter then we'll charge you the lower amount. This is our 'Lowest Bill Guarantee'. It will run for two years, and at the end of this period, you can choose whether to switch to a metered tariff for good, or remain on your original tariff.

## 3) Replacing lead pipes for free

While we are fitting these meters, if your property has a lead supply pipe, we'll replace your water supply pipe for free when we fit your meter, or give you a voucher for 65 per cent of the cost if you wish to arrange this yourself. This voucher will be valid for two years. There may need to be some digging work at your property.

## 4) What will happen if I move out?

If you move out of the property, and have not switched over to a metered tariff (or are still under the terms of the Lowest Bill Guarantee two year period), then whomever moves into the property will then be subject to a metered tariff.



# It is not always clear that meters will be at a household level; customers would like to see more context about why this is necessary

## 1) What is United Utilities doing?

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### Key takeaway

Customers understand that water meters will be fitted to their area – but can initially misunderstand that they will be monitoring homes on an individual basis  
*"It's not clear if the meters are going to be per house, per street, per road"*

### Perceived benefits

Some can see the environmental benefits to United Utilities in that they will be able to better identify leaks and monitor water usage

### Objections

Customers are concerned that the data collected would be used 'against them' and that United Utilities will raise prices by stealth. Some are concerned that leaks being highlighted may cost them money to repair  
*"Even if it's not in the property it can be used against us"*

### Improvements

Messaging needs to be more direct so that customers understand exactly what to expect and will not feel misled. The wider context and reason for undertaking the work would be appreciated

# Some are interested in finding out what their bill would be like in this 'no risk' way but there is some scepticism to overcome

## 2) Making sure you have the cheapest water bill

Once we've installed the meter, we'll then be able to tell you if you would make a saving on your existing bills based on the amount of water you use. We know that many of our customers would be better off with a meter but are put off applying as they're not sure if they would make a saving compared to their existing fixed bill.

Going forward, every time we send you a bill we'll now show you what you would pay based on your meter reading. We'll compare this against your current fixed bill and if you would have paid less with a meter then we'll charge you the lower amount. This is our 'Lowest Bill Guarantee'. It will run for two years, and at the end of this period, you can choose whether to switch to a metered tariff for good, or remain on your original tariff.

### Key takeaway

This message appealed to those who are opposed to meters due to financial concerns but those very opposed feel it could be a way to collect data to use against customers at a later date.

*"United Utilities are a business and they want to make money"*

### Perceived benefits

Those who believe that they would pay more with a water meter are open to being able to see what their bill would actually be like without the 'risk' of paying more money

### Objections

Those who object believe that it is just a way to collect data in order to justify increasing bills. They also believe that United Utilities may change the policy later on and move everyone to a metered charge without consent

### Improvements

Those who are very opposed would want to see a comparison for a longer period such as 5 years. It would be important for customers to know that it will be their choice to switch bills and it will not be done automatically

# Customers agree that replacing lead pipes is important but they have many questions around the ‘terms and conditions’

## 3) Replacing lead pipes for free

While we are fitting these meters, if your property has a lead supply pipe, we'll replace your water supply pipe for free when we fit your meter, or give you a voucher for 65 per cent of the cost if you wish to arrange this yourself. This voucher will be valid for two years. There may need to be some digging work at your property.

### Key takeaway

Being given assistance to replace lead pipes is a generous offer and it would be beneficial if this work could be carried out. The terms and conditions are not clear as to what this would include so more information is required

### Perceived benefits

Most are aware that lead pipes are dangerous to health and should be replaced when discovered. Therefore offering assistance to have this work done is well received

### Objections

The paragraph does not make it clear what work would be included. Would the work include making good on the property and does it extend to inside? The owner could end up with a large bill that they may not be able to afford

### Improvements

Although largely positive, there are a number of questions that may not fit easily into this leaflet. It may be that this is not included or is not prioritised in the main message

# Automatic switching for new residents was poorly received with some feeling this was an ‘underhand’ way to impose water meters

## 4) What will happen if I move out?

If you move out of the property, and have not switched over to a metered tariff (or are still under the terms of the Lowest Bill Guarantee two year period), then whomever moves into the property will then be subject to a metered tariff.

### Key takeaway

This is the main reason for installing water meters. It is potentially moving everyone onto a water meter ‘via the back door’. However it will mean that eventually everyone will be in the same position

### Perceived benefits

Many did not like to hear this information, but some did feel that it was a fair way to get everyone on the same system

### Objections

It is taking away people’s option to choose if they are on a meter or not and feels ‘underhand’. Statistics about households already on water meters did not increase positivity for those who are most opposed

### Improvements

There is no clear recommendation for enhancing this message; more context about the metering rollout upfront would help to soften this

# In summary, there is some work to do on the messaging, with a number of concerns highlighted by customers

## 1) What is United Utilities doing?

The upfront message is unclear with many believing that water meters will be monitoring areas and not individual homes

There is a negative response to the programme with many believing it's a 'sneaky' way to force everyone onto a meter

Those **most opposed** believe that it is a profits driven exercise and is taking away their 'right' to choose

## 2) Making sure you have the cheapest water bill

Many customers that are **open** to having a meter feel that the programme feels reasonable; the **Lowest Bill Guarantee** seems like a fair way to roll out more meters, a way to ensure everyone is on the same system and a 'risk free' way to test water meters

But for those that are **opposed** to metering, there remains considerable suspicion about the motives behind the programme

## 3) Replacing lead pipes for free

Lead pipe replacement is on the face of it a **useful and generous part of the deal**, but would not in itself convert those opposed to meters

Not all those who had lead pipes believe that they would take advantage of this because of the disruption involved and concerns that UU would not honour the agreement, leaving them with a large bill

## 4) What will happen if I move out?

This message was **the least liked** and seen as the main motivation for United Utilities installing shadow meters

The message being shown last made it seem as if it was trying to **disguise United Utilities 'true motives'**

The only positive is that it is a way to ensure that everyone eventually moves onto the same system which seems more fair

# Building compelling messaging

# What is driving the more extreme forms of the rejection of metering?

- There is a lot of mistrust around water meters and their purpose
  - Many, especially those who are most opposed to water meters, believe strongly that there is an ulterior motive for their installation
  - It is difficult to convince those who are most negative as they are most likely to accept any information that confirms their beliefs over factual information that disproves it (confirmation bias)
- We also see people who are concerned about finality of their decision and that once they are on a meter they will not be able to reverse their decision
  - While they resist water meters they are still able to make a choice, but once they switch they will no longer have any control
  - Some want to keep the status quo and just want to keep their current set-up regardless of the benefits of moving

A full and frank account of the need for meters using the following structure will help to bring customers on board, creating a sense of a common goal



## Problem

Outlining the challenges that climate change and population growth are posing



## Solution

Explaining in a clear and transparent way how the problem will be tackled



## Benefit

Reassure that the solutions will benefit not just United Utilities in tackling the problem but also customers

# Clearly outlining the problem in a clear and honest way will help people to empathise with the challenges United Utilities face



## PROBLEM

- Outlining the challenges that climate change and population growth are posing
- Although 45% are on meters, in order to help safeguard the network for the future, UU needs much greater insight into customer water use and where there are leaks in the system (including on customer premises where they may be causing damage)
- UU also wants to ensure that customers are not overwhelmed by higher water bills



# Explaining the solutions clearly and how this will be tackled addresses any misinformation and makes less space for conspiracy theories



## SOLUTION

- United Utilities will be rolling out a programme to install water meters in the street outside people's homes; this will allow United Utilities to better understand water use at an individual household level and identify leaks
- United Utilities will have a much greater insight into the water network, allowing them to plan for the future and identify leaks both on the network and on customer premises

# Ending with the benefits after highlighting the issues leaves customers on a more positive note



## BENEFIT

- Many will save money, and there are stats and case studies to show this, but to ensure nobody will be paying more as a result of the meter being fitted, the Lowest Bill Guarantee will apply to ensure we know whether you will pay less over an extended timescale
- While this work is being carried out, there is an opportunity to replace customers' lead pipes for free if they have them, reducing the cost of these replacements for both customers and UU, and reducing any potential health risks across the region

# There are mixed views on messaging format...

A number of different preferences for messaging format were put forward. Customers are initially more concerned with content, but a number of principles were highlighted

## Multiple formats

- Some customers pointed out that an 'appointment' communication highlighting when work will occur would be better presented as a letter
- However, this would not be suitable to outline the finer details of the rollout; further supporting information would be expected alongside this

## Visuals, statistics and case studies

- The need to provide greater context around the reason for the rollout, as well as detailed information on expected savings points towards well executed visual communications
- Engaging materials to 'tell the story' would be welcomed

## An online resource

- Customers display different appetites for the level of information they would like to see
- It is noted that some customers might like to receive the initial communication through their door, with the ability to read up on further detail on the UU website

# Some watch-outs and factors to consider

## Clarify pricing decisions and future rises

- The messaging may benefit from clarifying how price determinations are set, and to reassure against any future rises (as far as is possible)

## Allowing customers to pay a fixed amount

- Customers on low income like having a fixed amount to pay so that they can budget
- Allowing them to continue paying a fixed fee (as they are likely to do with energy) would remove this barrier

## Detail the work that may take place on the property

- Some customers still question whether characteristics of their properties mean that some digging may be required
- Outline any impact this might have

## The approach to identifying and fixing leaks

- There is some concern over how leaks on a property are identified and who pays for this
- Highlight potential damage to property through leaks and any assistance in repairing them

## Clarify that meters measure individual properties

- Many felt the original messaging obscured the fact that meters will be fitted at property-level
- The comms need to be upfront that these meters will measure household use (and identify leaks)

## Lead pipe works

- Some questioned the extent to which lead pipes would be replaced (internal vs external?)
- Clarify the benefits as well as highlighting any potential disruption /digging on a customer property

# The WaterTalk panel

- Water Talk is an online community designed to reflect the views of those in the North West who have access to the internet (circa 90% of the population)
- Customer panels typically provide a deeper level of engagement with customers than ad-hoc pieces of research
- It provides rapid research access to UU customers
  - This can provide fast and cost effective feedback on a wide range of issues
- Where appropriate, work is supported with other methodologies and samples to represent those not present on WaterTalk
- Nearly 8,000 UU customers are on the panel:
  - 3,600 have taken part in a research activity in the last 6 months

To find out more about using the WaterTalk panel to meet your business needs, please contact **Shy Sharma**:



## Shy Sharma

Customer Insight and Exploration Manager

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