

Water Visualisation Research

Customer co-creation

Research March 2023



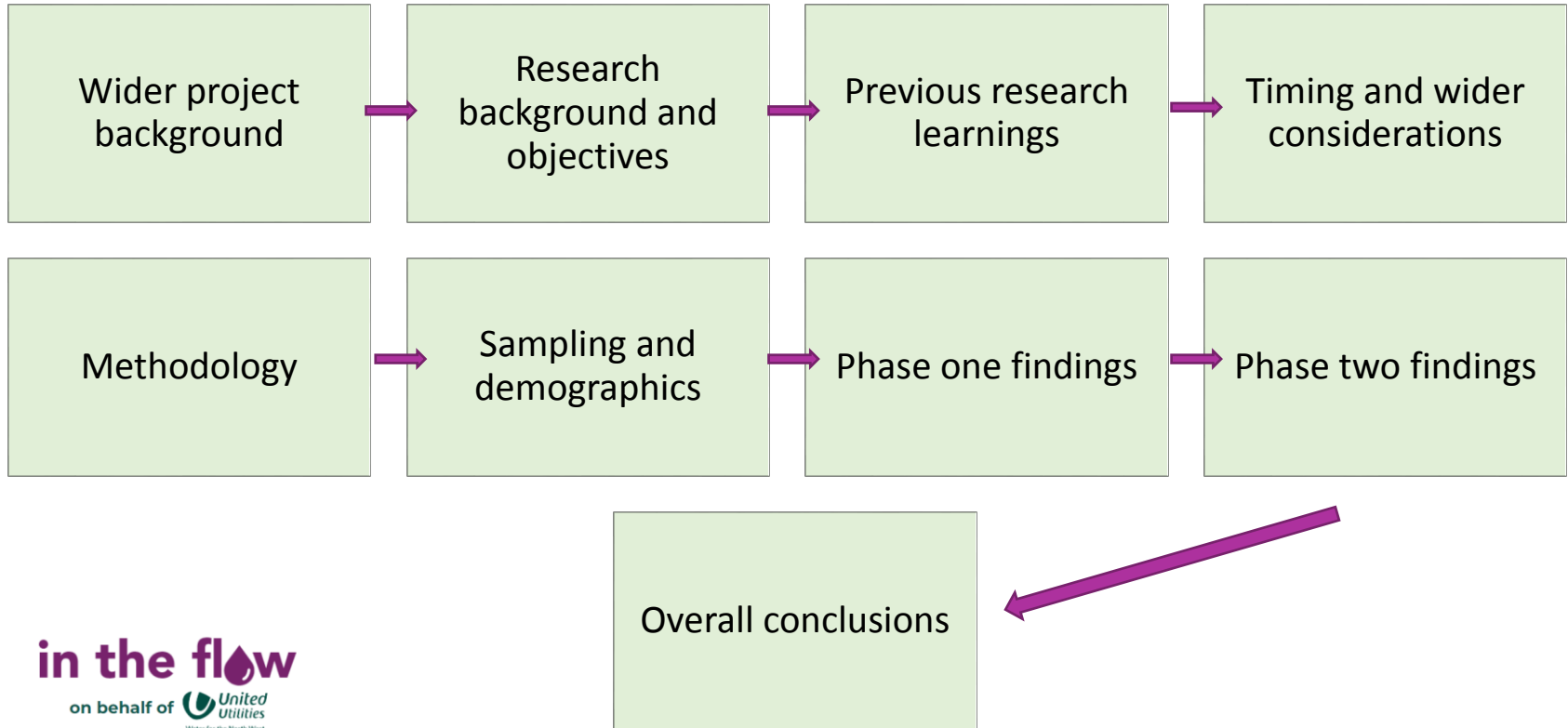
in the flow
on behalf of  **United Utilities**
Water for the North West

explain 





Structure



Wider project background



Project Background

With the current **cost of living crisis** it has become more important than ever for United Utilities to provide money saving options to customers.

United Utilities would like to provide customers with **more control** over their water usage, helping them to understand the link between usage and how much water costs for different activities more easily.

The goal is that this will ultimately help them to save money and start to understand some of the environmental drivers too.

Research Objectives

- Understand what customers know about their water usage – explore visualisations, expectations and requirements through focus groups.
- Use focus group findings to develop a proof of concept for a product that would enable customers to see their water usage online.
- Findings will also help to support a small trial that United Utilities is planning to conduct with customers using email or SMS to provide them with water usage data/information.
- Follow up with participants from the focus groups, to test creatives and propositions that United Utilities has developed.

Timing and wider considerations



At the time of both phases of the research, there were a number of **external factors** that should be taken into account when interpreting the findings in this report. These include the ongoing cost of living crisis, energy crisis and a rise in interest rates, which impacted respondents throughout both phases of research.

Why is there a global energy crisis and who might suffer most from it?

© 30 October 2022



We are in the midst of the first global energy crisis, according to the International Energy Agency.

UK interest rates: How the rise affects you and how high it could go

© 15 December · Comments



Martin Lewis: On a FIXED energy deal? Will you pay less under the new 1 Oct price guarantee?



Martin Lewis
Updated 17 October 2022

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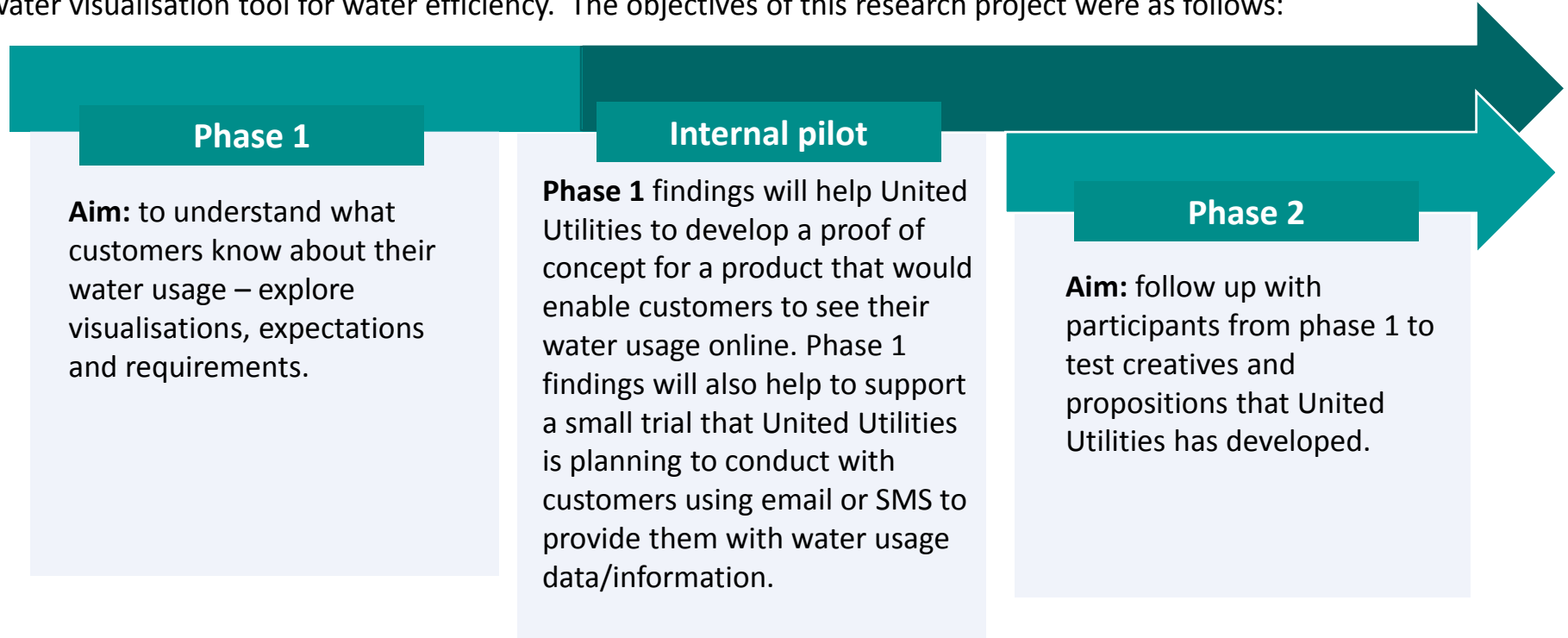
ARTICLE

Cost of living crisis: everything you need to know

Research background and objectives



With energy meters top of mind for most customers, it is an **ideal time** to explore the proposition of a water visualisation tool for water efficiency. The objectives of this research project were as follows:



Previous research learnings



- An app was mentioned and proved popular within the forum, along with viewing the data on customers' United Utilities account

Smart metering and water usage forum topic: Water Talk (May 2021)

Smart metering phase (qualitative) (August 2022) 1

- For households – cost of living was an immediate concern/biggest motivator
 - Questions about visualisations/analytics were raised *'how will this work and how does this save me money and time?'*
- Positives were: provision of accurate billing and identifying leaks

- For households – the most appealing feature of smart water meters was the ability to help reduce water usage and potentially bills
 - 67% of metered household interested in household water consumption via app or smart device
- 66% liked that it helped them to understand water usage
 - 82% interested in rewards for reduced water use

Smart metering phase (quantitative) (November 2022) 2

Brand tracker (December 2022)

- Highlighted a growing interest for customers in seeing how much water they use in their online account with United Utilities (52%)

Methodology



Phase 1 – January 2023 Online qualitative focus groups

- An app was mentioned and proved popular within the forum, along with viewing the data on customers' United Utilities account

- 7 attendees at each online focus group
- (2 individual focus groups)

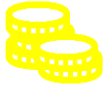
Phase 2 – February 2023 Online qualitative focus groups and quantitative survey

- Attendees from phase 1 reconvene in second group for **co-creation** of visualisation tool

- 5 minute quantitative online survey distributed to In the Flow members



Online groups conducted via Zoom



£30 incentive for focus group participants per phase



Each group one hour in length

Note: only metered customers took part in focus groups.

Recruitment: poll and survey



We've got an exciting new opportunity for you!

2 weeks ago In The Flow

We would like you to register your interest in United Utilities' latest research project. We are looking for people to take part in online group discussions and help explore some new ideas, to find out what you would be interested in receiving from United Utilities around your household water usage.

In January, we'll be asking you for some initial thoughts about what information you would like to receive about your water usage. The United Utilities team will then develop some concepts based on your thoughts and we'll be asking the same members to reconvene in a second group in February to test the ideas out. Groups will be as follows:

- 4th January 6-7pm and reconvene in February (week commencing 13th Feb -date and time TBC)
- 5th January 6-7pm and reconvene in February (week commencing 13th Feb -date and time TBC)

If you are selected to take part and complete both discussion sessions, you will receive a £30 VEX voucher at the end of each session (£60 Vex in total) as a thank you for your time. Sessions will take place on Zoom and will last one hour each.

If you're interested, please select the dates below that you can attend by Friday 16th December. We'll then be back in touch with you to ask you to complete a short online survey. Please note, we require eight attendees per session and cannot guarantee that you will be chosen. If you are not chosen, we will still be asking your thoughts on this topic on the online community and there will be more opportunities in the future!

Yes - 4th January 6-7pm and reconvene in February (date and time TBC) 57.6% (141 votes)

Yes - 5th January 6-7pm and reconvene in February (date and time TBC) 49.0% (120 votes)

I am interested but can't attend on those dates 10.6% (26 votes)

I am not interested 9.4% (23 votes)



+9 others commented

13

1. Please let us know which of the following applies to you: *

- I am a metered customer
- I am an unmetered customer
- I don't know if I have a meter or not
- Prefer not to say

2. To take part in this research, please can you confirm which technology devices you have access to? *

- A laptop computer
- A desktop computer
- A tablet (e.g., Ipad, Samsung Galaxy tablet)
- A smartphone
- None of the above

3. How would you rate your technical ability when it comes to using online tools? *

- Very confident
- Somewhat confident
- Neither confident nor unconfident
- Somewhat unconfident
- Very unconfident
- Prefer not to say

4. Would you find it useful to receive information about how much water you use from United Utilities? *

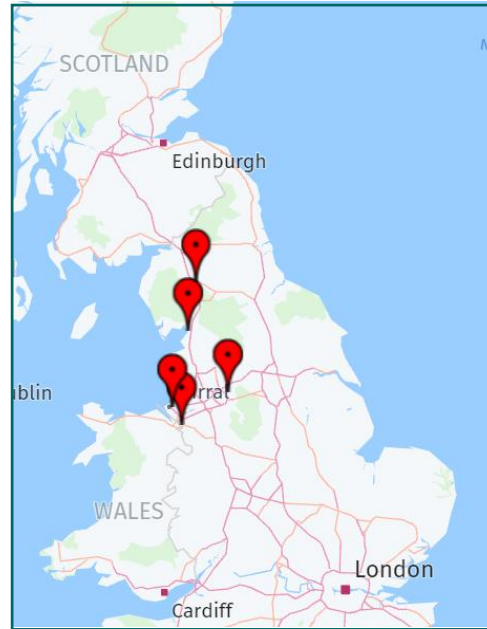
- Very useful
- Somewhat useful
- Neither
- Not very useful
- Not at all useful
- Prefer not to say

Respondents who provided one of the circled answers were selected to take part due to the nature of the research.

Sample and demographics – focus groups



The research was designed with Ofwat principles of high quality research in mind, for example ensuring inclusivity of customers across a spread of socio-demographics and areas.



The same participants from phase 1 were invited to reconvene in phase 2

14 respondents invited overall
7 attended each group in phase 1
6 attended each group phase 2

- 8 Male
- 6 Female

- 6 x 30-40
- 2 x 41-50
- 1 x 51-60
- 5 x 61-70

- 10 x Employed full time
- 1 x Unemployed
- 1 x Self employed
- 2 x Retired

- 3 x Cheshire
- 1 x Cumbria
- 2 x Lancashire
- 3 x Merseyside
- 5 x Greater Manchester

Section one

Co-creation

Members of In the Flow were invited to take part in focus groups to discuss what customers wanted from a water visualisation tool and what was important to them when understanding their water usage...





Customers were mixed in terms of how **'efficient'** they were with water usage. Some made a lot of effort whereas others felt that they could do more.

Bath

Shower

Washing machine

Toilet

Examples of **water saving behaviours** that customers were engaging with included:

- Having more showers than baths
- Having quick showers
- Utilising water saving devices provided by UU (e.g., for timing showers and flushing toilets)
- Using eco-settings on washing machine
- Store water from showers for watering plants, mopping floors or flushing toilet

"We've had the freebies from United Utilities, like X was mentioning the timer and the flush for the toilet, but probably not perfect, there's probably other things we can do to improve"

"We do try, we got the shower saving timer thing, got the thing in the toilet with the flush. It's like X was saying before, just trying quick showers, minimising baths, having more showers rather than baths really. Just trying to monitor. Our washing machine goes up like an eco-setting, whether that is a contributor to using less water, as well as less electric hopefully"

Cost was the biggest driver to save water and be water efficient



As well as saving money, customers mentioned the following drivers:

Better for the environment

Less waste

"I just don't want to say any waste really, because it's precious. And when you see things like during the summer with the intense heat that we had, and the hose-pipe bans, not necessarily this way, but we have had in the past. You want to preserve it really and look after it"

"Bills"

"I'd definitely say the bill"

"The biggest one would be cost"



Customers wanted a range of information when it came to their water usage



Water usage by
time of day

Comparisons to
water usage in
previous years

Local average water
usage

Setting goals/a
water 'budget'

Comparisons to
average water
usage

Information about
which devices use
more water

"I'd like if there was a smart meter, you know you've got the green and the red, so it indicates when you go into a danger zone of what you're spending, I think if it was possible to set it yourself if you have a budget, where you tell the meter to let you know when it's got to a certain amount or something"

"I think maybe the time of the day, the highest usage is either morning, afternoon evening, then you can perhaps monitor your usage by what you're doing at those different times, perhaps"

Customers also agreed that being able to see household water usage would make having a meter **more appealing.**

For comparison data and information, customers were clear on what they would like and wouldn't want to see



-A comparison to households of a similar size



- This **was not considered particularly useful** because customers felt that the size of property would not determine how many water users were in the household.



-A comparison to households of the same number of people



- This **was considered to be useful**. One respondent said they get similar data via their Hive and found this worthwhile. It was mentioned that considerations to the age of individuals would need to be made.



-A comparison to own usage from previous months



- This **was considered to be useful**. Some respondents mentioned that they would like to see this in graph format. It was mentioned that considerations to time of year and house type would need to be made. In addition, one respondent mentioned having the ability to add in school holiday periods as water usage typically increased during this period.



-Personal goals



- This **was considered to be useful**, particularly in relation to how much money customers were saving.

Customers would like to be proactively informed if a leak was suspected



They would want to be informed of this as **quickly as possible** i.e. in form of an **alarm or alert**.

In addition they would like;

- Information on who is responsible for the leak and who would be responsible for fixing it
- Information on cost associated with fixing a leak if it would be the homeowners responsibility
- Recommended plumbers if it would be the homeowners responsibility
- Information about **why it was suspected that a leak** was present
 - This was particularly important to some customers as they felt that sudden high usage could have other explanations, for example if visitors were staying and wouldn't want to be unnecessarily stressed
- Information on next steps for example a checklist of things to check/action in the instance of a leak

"Hope to be informed as quickly as possible"

"It's very high bills and you would hope that they would flag it to you and say that this is much higher than usual and try and figure out what the problem is"

"I'd like to know who was responsible, whether it was the householders responsibility, United Utilities responsibility, and who was going to pay for it. And if you were going to pay for it, what the cost might be, definitely"

Explaining water saving data



Find leaks inside your home

Leaky loos lose loads!

One of the biggest outliers for leaks in the home are modern push button toilet systems. Nearly 50% of all leaks reported to us last year were leaky loos!

A faulty cistern could be costing you as much as 8400 a year in wasted water so it's really worth checking if this is the problem and getting it fixed.

Our video opposite explains more and you can order a FREE LeakyLoo strip from Get Water Fit to check.

[GET WATER FIT!](#)



DIY expert Craig Phillips and plumber Drew Styles team up to help you spot the ei

Watch on  [YouTube](#)

Help repairing your leak

If you've found a leak in your home and need a plumber to help repair it, you can find WaterSafe approved plumbers in your area to help you get it fixed. Click the button below for more.

[FIND A PLUMBER](#)

Other common causes of leaks in the home



Dripping indoor taps and/or pipes



Dripping showers



Dripping outside taps



Dripping overflow pipe (located outside)



Water tank leaks



Behind your washing machine and dishwasher

Also check your radiators and behind your washing machine and dishwasher to make sure the water hoses are properly connected.

If you have an older toilet cistern, check the overflow pipe that goes through the wall to make sure it's not dripping. If it is, your cistern is faulty and needs repairing.

For help locating and fixing leaks, you can find WaterSafe approved plumbers in your area by clicking the button below.

[FIND A PLUMBER](#)

Customers were shown website page in which those with a suspected leak are currently directed to. Overall, this was **received well** and most felt it **covered what they would expect to see**.

"The idea of recommending a plumber is a good one. So, you'd get somebody who's basically not going to rip you off. I think that's a good idea."

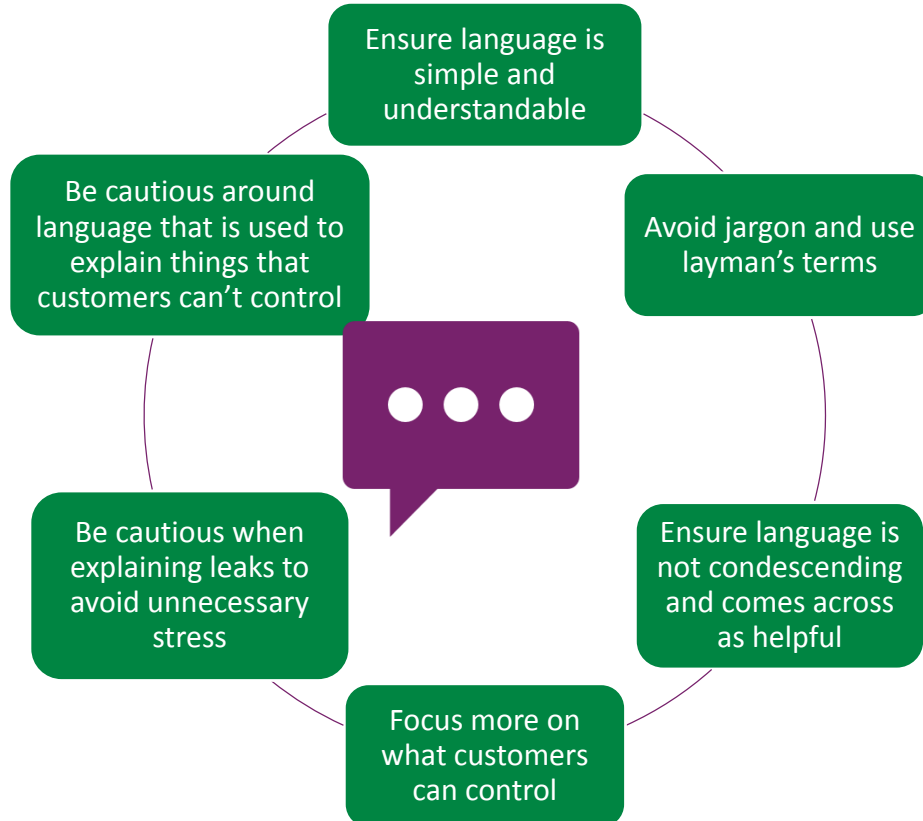
Suggested **improvements/additions** included:

- More personalised information (for example which appliances/devices are most likely to have a leak)
- Information on how much it could cost per leaking appliance/device
- Information about frozen pipes (seasonal based on bad weather)
- DIY tips on fixing leaks (though some felt this could be dangerous)

Explaining water saving data – language and terminology



When communicating with customers about water saving data/information, customers felt that it was important to consider the following:



Customer preference for language and terminology



Customers were asked about how they would prefer water usage was communicated, for example by metrics units, cost or in terms of 'real life' examples.

Overall, most **would prefer to see this presented in monetary value**, however only slightly fewer wanted to see this in terms of toilet flushes. One respondent mentioned that the descriptions were missing context over time.

Some respondents expressed surprise that £3 in monetary value was the equivalent of 1,000 litres of water and expected the cost to be higher than this.

POLL RESULTS

£3 in monetary value	5
111 toilet flushes	4
1,000 litres of water	2
14 washing machine loads	1
28 showers	1
3,300 cuppas	1

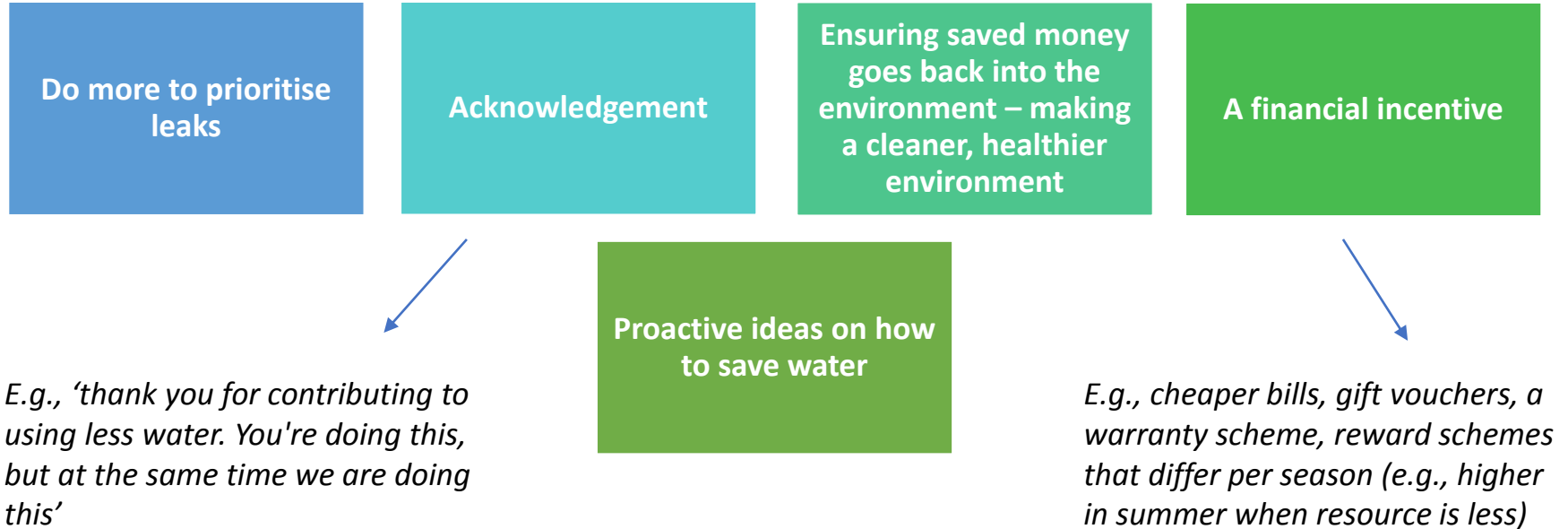
"£3 doesn't sound a lot of money though" (ANSWER £3 IN MONETARY VALUE)

"It's just something that I use a lot. I wash my clothes a lot, so it's a good marker for me personally, you know" (ANSWER - WASHING MACHINE LOADS)

Incentivising water saving



In terms of expectations that customers would have **from United Utilities** if customers were to save water, the following **expectations** were mentioned. Customers would like acknowledgement from United Utilities and communication around what United Utilities is contributing to too.



Viewing and using the data



Customers were asked **how** they would like to see data/information about their household water usage.



-SMS



- This **was not considered particularly useful**. Some said they wouldn't pay much attention to a text and/or they felt it might not support the amount of information they'd want to see.



-App



- This **was considered to be useful and was mentioned before being prompted**. It was mentioned that an App would allow customers to choose how much information they wanted and also meant that they could choose whether to have notifications on/off which was seen as a positive.



-Email



- This **was considered to be useful**. Customers said that they would be more likely to read an email than an SMS – unless the SMS was about an urgent issue.



-Other



- Some customers would prefer to receive information via post or to receive water usage data/information alongside their current bill. One respondent mentioned that the postal bill they currently receive is well laid out and better than what is provided online

Viewing and using the data



Customers voted in a poll which asked ‘*Out of the below options, how would you prefer to see water usage information?*’. **Overall, the majority across groups would prefer an App.**

In one group, a key concern mentioned was around **inclusivity** and **accessibility**. Although those participating liked the idea of digital tools to view water usage data, they highlighted the importance of considering those who would likely be digitally excluded.

POLL RESULTS

App	10
Email	3
Other	1
SMS	0



“For me, personally, I prefer the app to view things rather than be notified by letter or email. But as everyone else has said, there needs to be choice. So other alternative means of getting that information across to people that don't have smartphones or tablets”

“There's so many people don't have a computer, but these companies assume we do. It's not going to change; some older people are never going to change. You have to think about those”

Suggested options for data provision – thoughts on simple SMS/Email



Customers were presented with the following information and asked to provide feedback:

Option A: Receive email or SMS with information on your water usage. This would be similar to the screen time alerts you get on iPhones. So United Utilities would send a text to a customer every fortnight for example that said something along the lines of, “in the last fortnight you’ve used xx litres and that’s up 10% from the previous fortnight.” The text might also provide some saving advice, but it wouldn’t have anything more sophisticated than that. Data would be available at most every two weeks or once a fortnight.

Generally, this idea **was well received by customers**, particularly for those who would only want to ‘dip into’ surface level information rather than explore water usage in any depth. The preference for receiving updates is monthly, unless a leak was suspected, in which case they would want to be notified immediately.

“That would be the ideal for me because it's not the most pressing thing in my life this. And so, I don't mind it being every two weeks and like at a surface top level information is exactly what I'm looking for while I'm going through my emails, just to kind of get the information quickly”



Customers would prefer to be updated **monthly**.

“I'd want to be told about a leak as soon as they detected it”

“I think if it came fortnightly, you'd get used to just deleting it”



Suggested options for data provision – thoughts on more detailed SMS/Email



Customers were then presented with the following information and asked to provide feedback:

Option B: Option B is similar to option A but with the addition of an online platform that shows usage trends – so United Utilities would send the same text as in option A but would then provide a place for customers to see more details and explore their usage themselves.

Generally, this idea **was well received by customers** who liked the idea of being able to obtain more detail if they wished to. It was viewed as a positive that this gave customers the choice and option of how they wished to use their data and whether they wanted to look further into it. Again, once a month was the general preference for frequency of receiving updates.

“It would be good to expand on it, like X said, for some people just a text might be enough, but for other people, they might, ‘Oh, hang on, I’ll just look into that a bit more.’ But if it was once a month or something it would be okay”

“That’s better for me because I want to see what’s happening. So, it’s good to get the initial message, but the I can choose to go on and find out more if I want to”



Customers would prefer to be updated **monthly**.



Suggested options for data provision – thoughts on one stop App

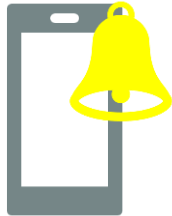


“That would be ideal for me”

Next, customers were presented with the following information and asked to provide feedback:

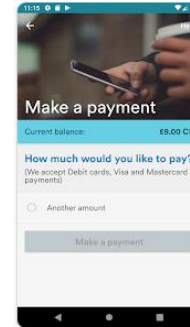
Option C: This would be a “one stop United Utilities app” (the My account app) i.e., a customer would download one app and be able to manage their billing needs, see water usage visualisation, submit meter reads and find all necessary contact details for UU in one place.

Customers described the one stop App idea as ‘ideal’ and all customers supported this idea. Some likened this to services already provided by their energy suppliers which they valued. Generally, customers felt that this feature would make them want the My Account App, but it was considered important that the My Account App would be a true ‘one stop shop’.



“I think push notifications for important things like if they suspected a leak, but not push notifications for ordinary things”

There were mixed views on push notifications. Generally, customers would only want to be notified if a leak was suspected or for something more urgent.



Generally, customers felt that this feature would make them want the My Account App, but it was considered important that the My Account App would be a true ‘one stop shop’ with all features included.

Suggested options for data provision – thoughts on dedicated App



Finally, customers were presented with the following information about a dedicated app:

Option D: Option D would be a separate app that is specific to water usage so a customer would have a United Utilities app for water usage and a different United Utilities app for anything else such as billing, meter reads etc.

Customers **were less supportive of the idea of a separate App** – they felt that multiple Apps for one company was unnecessary and would ‘clutter’ their mobile phones. Some also felt that separate Apps would become ‘confusing’ and ‘tiresome’ and would ultimately discourage use.

“I would prefer just one app, I wouldn't really want two apps for one company really, I'd probably find it confusing. And with two lots of notifications coming in, I might tend to ignore them, just because it's a little bit too much.”

“I think it's just making people's phones cluttered, as people have said, too many apps. I don't understand why you'd have two just for water. It just seems a bit pointless really”

“There's too many apps already, the phone is just cluttered with apps”

“Over time, a lot of people will go, 'Oh, there's no point in me clicking on that, that's just an area one or something unless you really follow it to understand it.' It's just going to get a bit tiresome”

Suggested options for data provision – preferences



When asked which option they preferred, **the majority of customers across groups would prefer the development of a 'one stop App'**.

POLL RESULTS	
Option C (one stop App)	10
Option A (simple SMS/Email)	3
Option B (more detailed SMS/Email)	1
None	1
Option D (dedicated App)	0



One respondent answered 'none' because they liked the idea of both option B and option C. The key concern about only having an App was that this would exclude those who did not have access to Apps.

"I went for none because I think B and C are the right ones. Like you can go online if you need to physically go online. But you should also have an app for that, because if you don't have the app, then you're basically cutting everyone off who doesn't necessarily have access to that. So, I would prefer B and C together, as opposed to choosing one option. I think this helps people who aren't tech savvy, and then just needs to be provision for people that wouldn't have email, text or whatever. I think that's the only thing that I'd say"

Snapshot of wider views on preferences




Members of the In The Flow community were also asked which option they would prefer. **43% of members would prefer a 'one stop United Utilities app'.**

"I think option C would be the best where you could have everything all in one place, this would make things easy and easier to understand for most customers"

In addition, a short survey was sent to community members to understand whether a tool to monitor personal water usage would make getting a water meter more appealing to unmetered customers.

In total, **54 unmetered customers** completed the survey. Of these, **34% said 'yes', 42% said 'no' and 35% were 'unsure'.**

 **Water usage options**
1 month ago [Your feedback](#)

You may have seen our latest research opportunity which has involved discussions around water usage. We would now like to hear from you all to gather your thoughts. United Utilities have been working on some ideas in relation to providing customers with information/data about their household water usage. At the moment, four options are being considered and we'd like to know:

- Which option do you think would be best?
- Why do you think it would be best?

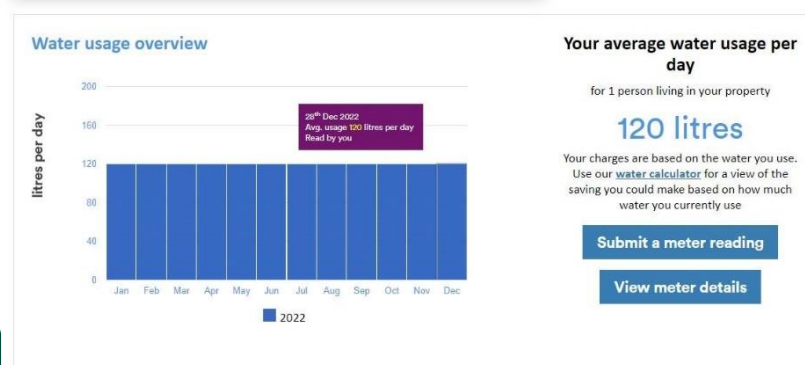
Option A: Receive email or SMS with information on your water usage. This would be similar to the screen time alerts you get on iPhone. So United Utilities would send a text to customers every fortnight for example, saying something like "In the last fortnight you've used xx litres and that's up 10% from the previous fortnight." The text might also provide some saving advice. Data would be available at most every two weeks or once a fortnight.	20.0% (30 votes)
Option B: Similar to option A, but with the addition of an online platform that shows usage trends – so United Utilities would send the same text as in option A but would then provide a place for customers to see more details and explore their usage themselves.	23.3% (35 votes)
Option C: A 'one stop United Utilities app' (the My Account app) i.e., a customer would download one app and be able to manage their billing needs, see water usage visualisation, submit meter reads and find all necessary contact details for UU in one place.	43.3% (65 votes)
Option D: A separate app that is specific to water usage so customers would have a United Utilities app for water usage, and a separate app for anything else such as: billing, meter reads etc.	2.7% (4 votes)
Something else (please comment below)	2.0% (3 votes)
None of the above	8.7% (13 votes)

Draft examples of water usage visualisations



Customers were shown the below screenshot of what a customer may typically see now around water usage data/information and were asked to provide feedback on the *information* and **look and feel**.

Described the look and feel as 'boring'



Would like to see comparisons displayed

Got a question? Try our FAQs

Felt that the graph could be more appealing – different colours? A line graph?

Would prefer to see usage in more relatable terminology than 'litres'

Would like to see information about how usage equates to cost and how much water different devices/appliances use

Draft examples of water usage visualisations



Customers were then shown the below images of potential ways to display such data in future. These were well received across customers who much preferred these visualisations to what customers can currently see. In addition, **all customers agreed that they would like United Utilities to explore this further.**

Liked being able to see comparisons in graphic form

Liked the notifications and felt that they 'made you want to open them'

Would like to be able to edit/tailor information – for example adding in school holidays to understand peaks in water usage



Push notification for customised targets



Visualising Consumption

Compare with similar households



Compare to your own home at a different time

Described the look and feel as 'professional' and 'appealing'

Liked that you can choose what comparisons you'd like to see – i.e. by area or for your own usage

Would like to be able to see daily/weekly/monthly usage and compare across different days/weeks/months etc.

Wider findings/additional considerations

Customers, particularly in one group, seemed to be **unaware of how their water meter is read**. In some instances, this caused confusion as to how United Utilities would obtain data to provide to customers and also made some customers question the reliability of data provided. **This may be an additional area to explore and communicate with customers to increase awareness and understanding.**



"You took the words out of my mouth, I was thinking if it was accurate, but it sounds like it would only work for a small proportion of people, because mine doesn't need reading, it all goes automatically, but someone else in this conversation was saying that theirs doesn't. So, it benefits some people and not others"

"I don't have a smart meter, it's the same as yours by the sounds of it, it's just that I don't have to send readings, and no one comes out to read it. But I'd like one!"

"It would make me question how they're getting that information, if someone's not coming out every fortnight to read my meter"

Phase one key findings



- The main driver behind engaging in water saving behaviours is **cost**.
 - Environmental drivers also pay a part as customers **don't like seeing water 'wasted'**.
- Customers **would like** to receive information from United Utilities about water usage – particularly in terms of the following:

Water usage by
time of day

Comparisons to
water usage in
previous years

Local average
water usage

Setting goals/a
water 'budget'

Comparisons to
average water
usage

Information about
which devices use
more water

- If United Utilities suspected that a customer had a leak, they would expect to be **proactively informed** as **quickly as possible**. They would also like to see information on who is responsible, cost associated, recommendations, information about why a leak was suspected and a checklist of next steps.
- When communicating with customers about water saving data/information – it is important that United Utilities ensure that **language is simple** (avoiding jargon and using layman's terms).
- Customers would like acknowledgement from United Utilities and communication around what United Utilities is contributing to too. In addition, they'd like United Utilities to: prioritise leaks, ensure saved money goes back into the environment, provide a financial incentive and to provide proactive ideas on how to save water.

Phase one key findings



- Customers would prefer water usage to be explained **in monetary value and/or in ‘real life’ examples such as amount in toilet flushes**– they did not relate to metric terms.
- Customers, overall, would prefer to see their water usage data/information in **App form** but felt that it was important to **consider those who were digitally excluded** and how this data could be made accessible to them.
- Customers much preferred the idea of a one stop App and were **against the idea of having two separate Apps.**



- Customers would prefer to receive data updates **monthly unless anything urgent was noticed** – in this case, they’d expect to be notified instantly (e.g., if a leak was suspected).
- Some customers are **generally unaware of how their water meter is read** – there is work to do by United Utilities to educate customers on this.

Section two

Follow up focus groups

Members of In the Flow were invited back to take part in a follow up focus groups.

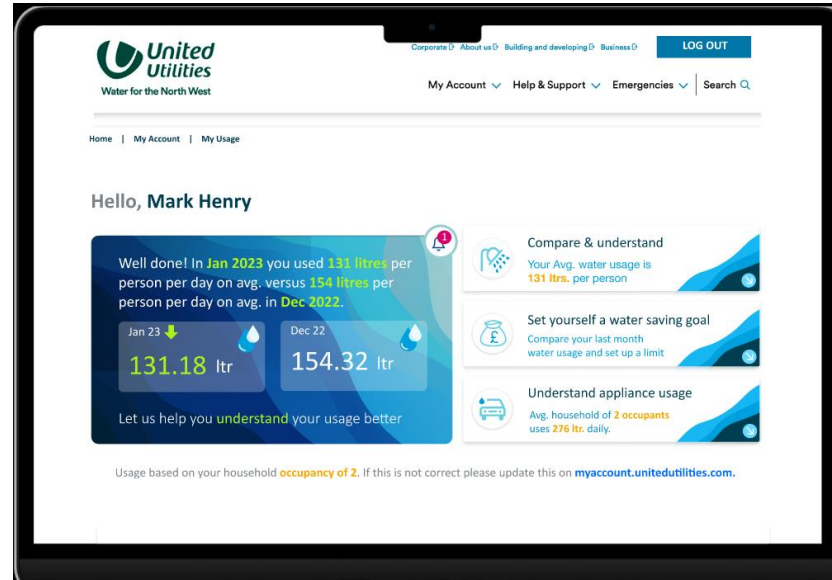
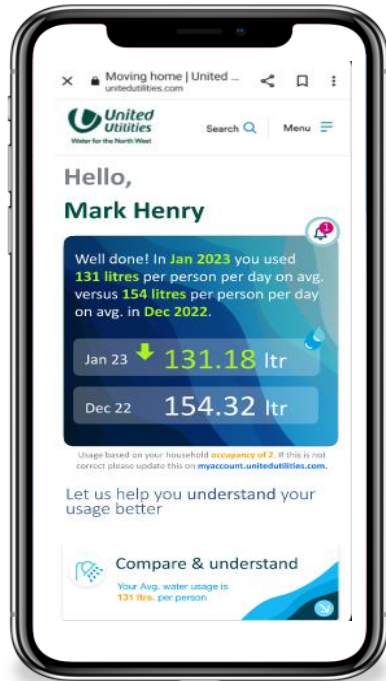
The PoC was demonstrated by the focus group moderator and respondents were encouraged to ask questions relating to its functions, as well as providing feedback on each feature.



Results of the co-creation



In phase 2, customers were shown the proof of concept that had been developed following their feedback provided in phase one. Customers recognised and appreciated that their feedback in phase one had been taken into account in the co-creation of the tool.

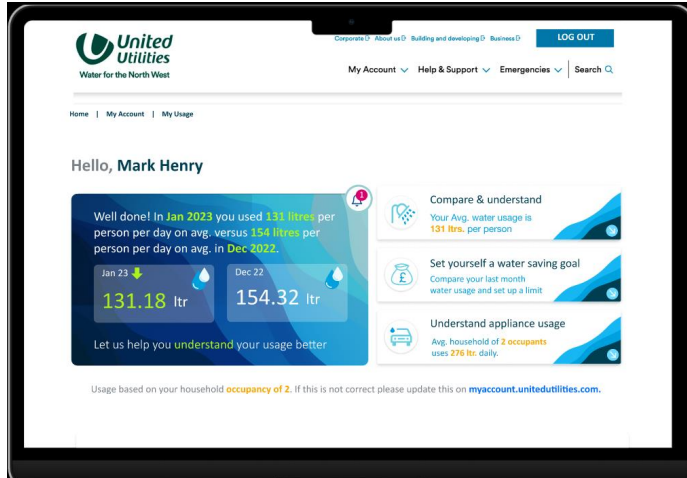


"I think a lot of the things we discussed in the previous group were taken into consideration and that's good to see."

Customers initial reactions were they liked it!



Most customers found the desktop version **clear and easy to understand**. The ability to “toggle” between different metrics such as litres, pounds and bottles was seen as useful, allowing customers to **visualise their water usage in a way which is understandable to them**.



Some felt that the **colours used within the graphs were too similar**, making it difficult for some users, particularly those with visual impairments/disabilities to identify differences easily.

Customers also noticed how some of the pages **jumped from focusing on individual water usage to household usage**. In general, customers would prefer the desktop version to focus on household water usage.

“I liked that you could toggle between bottles and money and litres, I think we all visualise it slightly differently, so that would be quite useful for me I think”

“It's very easy to look at and understand and it's not overcomplicated”

“I would suggest is considering disability options, I'm colour blind and a lot for the charts are quite similar colours, so some of the charts are quite tricky to see it at a quick glance”

Mobile version – initial reactions

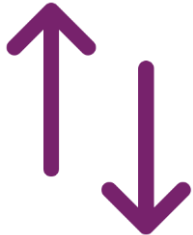


Members across the two groups were more split on their reactions to the mobile version. Members within the first group found the mobile version clear and easy to understand **and liked how it closely resembled the desktop version.**

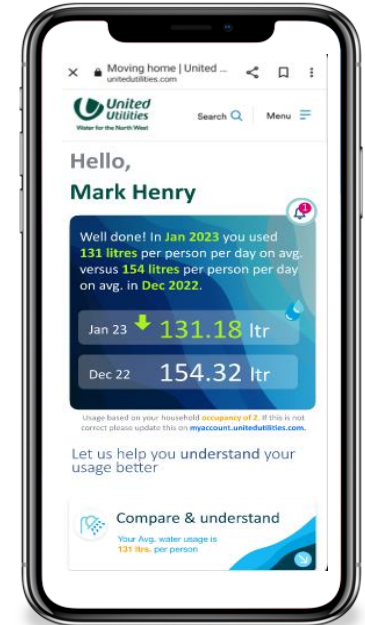
thought it was clear I like how the website and the mobile look very similar with the graphs and visuals, so someone that uses both should be able to have no issues finding what they need"

"I like it. It's clear and comprehensive, I can't see anything wrong with it"

Some members within the second group felt that the mobile version could be **difficult for some users to know how to navigate** certain pages. **Visual cues such as arrows were suggested** as a way to highlight how users can move within a screen.



When you toggle sideways from scrolling down, some people mightn't understand to do that. I knew to do it, but a lot of older people wouldn't know and if they're already scroll on down, and then they have to toggle sideways, there's not really an indication to tell them they're to do that"



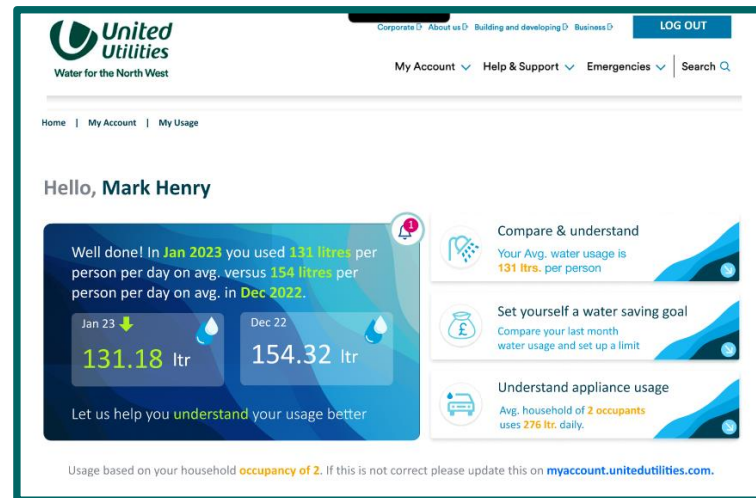
Personalised welcome page



Customer were then asked specifically about the **personalised welcome page**.

- Respondents found the information on the page useful
- The layout of the page was clear, helping customers easily navigate their way through the site
- Customers liked the “well done!” message but wondered what an appropriate message would be if you haven't done as well with your month’s water usage
- Respondents would find yearly or quarterly comparisons more relevant than monthly

The only critical comments were on the formatting with some members finding it difficult to read the green text in the dark blue panel



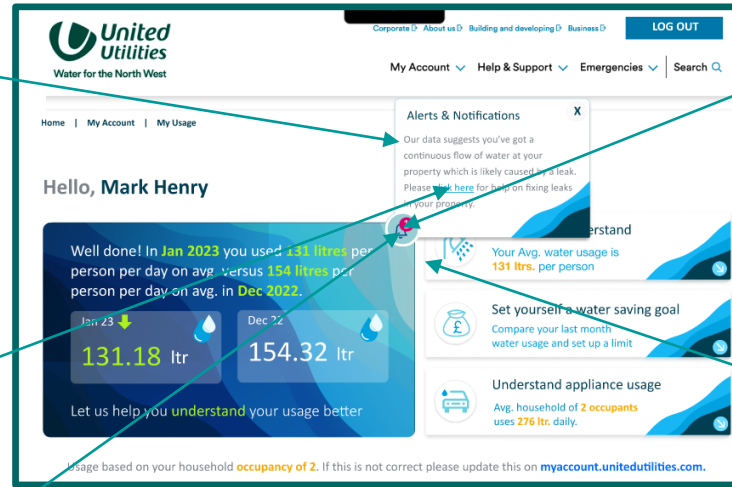
Welcome page – alarm notification



Respondents stated that most customers would not understand the term **'continuous flow'**

Suggested that a contact number is displayed here instead of just "click here"

Some respondents suggested using a larger or more visual icon since some users may miss this notification



When first looking at this screen, respondents found the notification alert useful

Some respondents questioned if this would be the only way customers would be notified of an issue

"I had a leak, I would like to see it flashing or something getting on there immediately"

"If you don't check the website or the app very often, would somebody notify you another way if there's a leak or something? Because that's quite important if you've got a problem that you don't know about"

Compare and understand



Following on from this members were shown the **compare and understand page**. Respondents liked the following features:

Ability to compare with similar households

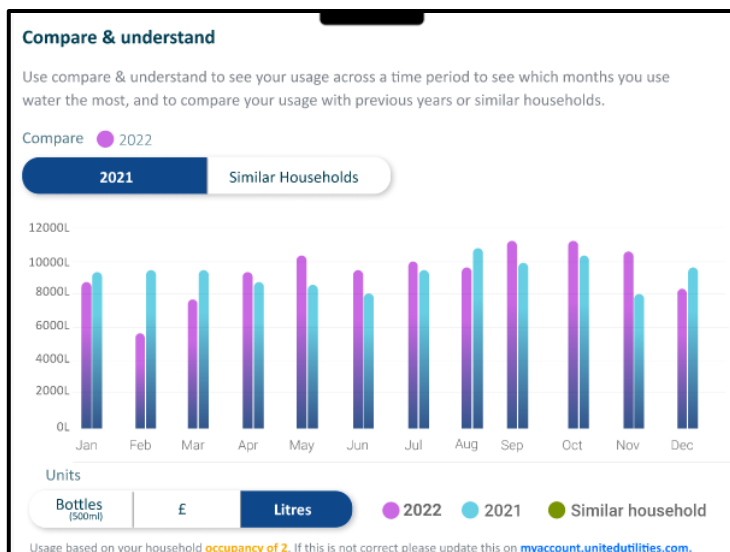
Ability to choose different metrics most suitable for each user

Ability to change the occupancy of the household

Clear layout and imagery used

"I actually really like this page"

"Yeah, I actually liked that though because we were talking last time about toilet flushes. And to change it to a bottle is useful, I've got a bottle here. You know, so it's nice to see that on a smaller term"



"I think it's good. You've got the option, what you prefer to look at the comparison bottles or money or litres first of all, because we didn't agree last time on what we prefer. I also think it's good to see a comparison with people with a household of same size as you"

"It says here about providing the correct information. So, I assume you go on to that address? If you have got four in your property, would that be done automatically?"

Compare and understand - improvements



Customers would find it useful if the graph included how much households could save

Customers suggested changing the colour for the 'similar households' option

Others suggested including both 'similar households' and yearly comparisons within the same graph

It may not be clear for certain users that they can toggle between different metrics

Pounds were the preferred metric, with bottles being the least preferred.

"I still can't equate to the figures on the left will be nothing to the majority of people, in my view... 15,000 bottles of water, that won't mean anything, will it? When they actually try and equate the amount of water they're using"



I think that the unit should be one or the other, pound or litre first. Because on this one, it shows that the bottle is the first screen you'd look at. And so, you wouldn't necessarily know to change it to pounds or litres"

Compare and understand – occupancy section



At this stage in the discussion, respondents were directed towards the bottom of the screen regarding changing your household occupancy.

Usage based on your household **occupancy of 2**. If this is not correct please update this on myaccount.unitedutilities.com.

Respondents did not initially connect the occupancy number with 'similar households'

The text here was seen as too faint. Bolder colouring was suggested to help draw their attention to this section

Greater detail is required to specify the types of people in each household, e.g., children, adults.

"It just seems a bit faint. So, I probably wouldn't even read it. I'd just see the website and think it's just advertising the website. But I wouldn't read it, probably"

"It does make sense, but how would you vary that if you've got a household with like two kids and two adults varying, a household of four students?"

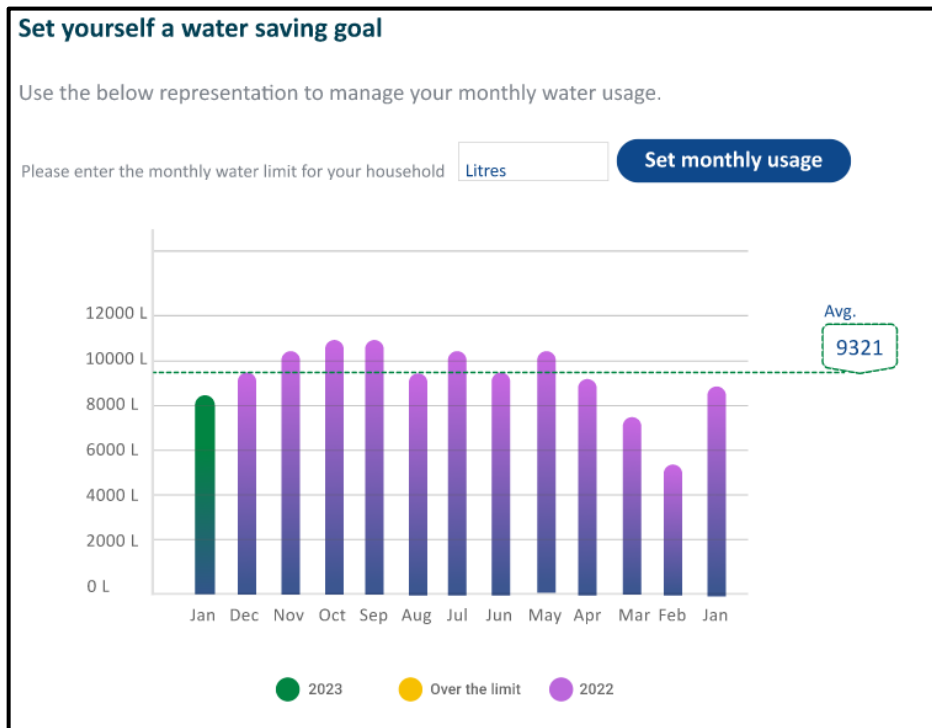
Setting water savings goals



Here, the discussion moved onto the **setting water savings goals page**.

In general, respondents across both groups **liked the idea of being able to set a water savings target**.

"I like it and the fact it isn't mandatory to do it, so if you don't want to don't do it"



"It's a good idea"

"I like the concept of it, like being able to put in a target, and it display that. And target months"

Setting water savings goals



Yet, respondents also identified a number of improvements. These included:

Consistency with metrics selected on previous pages

Include a “toggle” as seen on previous pages to allow users to select their preferred metric

The metric of pounds was the preferred option for respondents. Customers could more easily understand usage in these terms

Provide a notification or alert if customers are approaching or if they have exceeded their target

“Where the litres things is it would be good to be able to swap that to just pounds”

“Pounds is probably the best one most people can understand. Because it's obviously that's their bill”

“I think because you've given people a preference, but then you're taking that away from them on the next part, and just doing it into litres”

“If you did set a monthly target there and you went over, is it going give you a notification on the main homepage, that you've gone over your limit what you said?”



Setting water savings goals



Respondents typically stated that it would be beneficial to alert users as they were **about to exceed their target**.

Notifying before customers exceed their target allows a change in behaviour to reduce usage

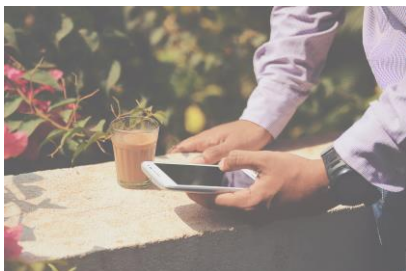
Monthly targets were preferred over more regular updates which would provide too much information

Some would like the option to 'fluctuate' their targets where water usage naturally changes across different months

Some questioned whether this would limit usage – people cannot simply stop using water if target is exceeded

"What I don't like with that, though, is where you've set your goal there a month, you can't fluctuate from month to month, you've got to have every month on the same...if there's months where you'd always use less, then their target should be less for that month. Otherwise, they could be using more than what they normally would"

"I still can't see the use of myself. If you go over your target, what are you going to do? Suddenly stop using water? I can't see how people change their habits personally"



"I think I'd prefer to know just as you're approaching something, rather than once I've hit the target. Because then it gives me a chance to start thinking, you could start cutting down a little bit and to keep that under your target"

Setting water savings goals



When asked whether customers should be incentivised for meeting their water usage target. Respondents here were split on this question, with some viewing it as an added benefit since they **would not have expected to be incentivised**. This was also seen as a chance to give back to customers during the **cost of living crisis**.



"I think with the way the cost of living is going anything you can give back to people would always be good, wouldn't it? It would always help them"

Yet, respondents also identified a number of **potential issues by incentivising customers** for meeting their water usage targets.

Issue of penalising customers who haven't set a target

Issue of vulnerability or disability – those who cannot reduce their water usage

No incentives are needed – the incentive is customers are saving money

How would UU manage these incentives with customers being able to set their own target?

Setting water savings goals



In general, respondents **liked the idea of receiving a notification** if they had met their water savings goals. Yet some issues with adding a notification were also identified by respondents. These included:

Adding it to this page could make it too messy and cluttered

This could result in multiple notifications popping up when a user opens the website/app

Some stated that no message should be displayed if customers fail to meet their targets

"I think it's going to make it look messy if you added anything else to this page or the app. Unless it was a tip at the end or something small. Anything else is just going to kind of make it too much"



"I quite like almost the opposite in how that graphic is, so when you go over it changes colour. I think when you stay under it's another colour, but nothing too whizzy"

"Well maybe on that first page when you sign in it can say your name and then say 'you're a Super Saver', or whatever is you are like to let you know, you're doing well... it's like when you go on the chat forum people get different names on their accounts, such as 'a gold user'"

"I don't think rubbing your face in not hitting your goal is a good idea, to be honest. So, I would just do nothing in that. I would just be more positive, you know, just congratulate when they do meet that goal and, and don't say anything when they don't"

Understand appliance usage



Here, respondents were then shown the next page on **understanding water usage**.

In general, respondents found this page useful and informative

Respondents found this page relatable with the addition of appliances

It is important to customers that they can select their preferred metric here




Customers want to customise this information to their household appliances and occupancy

“We’ve talked about a family of two on your homepage, but then on here, it goes on about showers, and it’s talking about a family of four spending one minute less. That should be customized based on what you put in as your household”

“I would like to have, for example, the one that says the shower 48 litres a day and so how much money is that? You know like all the same metrics we had before to have them here”

Understand appliance usage

How much can you save by reducing your water usage. See our [Get Water Fit](#) page for more ways to save water.

 <p>Shower</p>	<p>A standard shower uses 9 litres of water per minute.</p>	<p>A water saving shower head reduces your water usage by upto 50%.</p>	<p>If each member of a family of four spent one minute less in the shower they could save approximately 48 litres of water a day!</p>
 <p>Dishwasher</p>	<p>Only run your dishwasher when it is full to reduce the amount of water you use.</p>	<p>Reducing your dishwasher use by one run per week for a year could save you £17 a year.</p>	<p>A standard dishwasher uses approximately 30 litres of water, or 60 bottles of water.</p>
 <p>Toilet</p>	<p>A standard toilet uses 9 litres of water per flush. Modern dual flush toilets use 6 litres.</p>	<p>A faulty cistern could be dribbling water invisibly down the back of the pan for a long period of time, & costing you as much as £400 a year if left undetected</p>	<p>The good news is that it's really easy to spot if you've got a leaky loo, find out more by visiting: Leaky Loos</p>

“I think people can relate to that much more and actual usage. So, if they're using over their limit, or their sort of set limit, they can cut down on certain areas. And they can actually see where they can save. And I think that's quite useful”

“Maybe just the option to just change different things as we don't have a dishwasher, so it would be in comparison to say a bath, just to give different options for the user to change different icons”

Understand appliance usage



In general customers found the **water savings tips on this page a useful feature** of the tool. Suggestions to improve this page included:

Provide monthly tips to keep customers engaged and returning to the page

Ensure units are specified e.g. the size of the bottle

Allow personalisation so users can select appliances they use

Focus on key tips for certain times of the year

Provide a section where customers can share their own tips on saving water to increase engagement



"Making it customisable to start... so during the winter it could be more focussed on leaky pipes and leaky taps, and during the summer it could be leaky hosepipes or something else, you know, just change through the year"

"I think you are only going to read it once. I think possibly flag one per month, like water tip of the month. This month it's the dishwasher and have it flashing or something to force people to notice it"

"If you don't rotate this page, people are going to read it once and then not read it again"

Impact on behaviour



In general, while most respondents were **already conscious of their water usage**, they did consider this tool to be beneficial.

Helps customers visualise their water usage in different ways

This tool will be most beneficial to those customers who aren't conscious of their usage

Helps to identify which appliances contribute the most to their water usage

Allows comparisons to previous months which helps to explain why water usage might be have increased/decreased

"I'm conscious anyway but it would help me focus on it a little bit more and maybe see what months I was a little higher or lower. I can form the bills but you know, just being able to see it more at your fingertips"



"Making it customisable to start... so during the winter it could be more focussed on leaky pipes and leaky taps, and during the summer it could be leaky hosepipes or something else, you know, just change through the year"

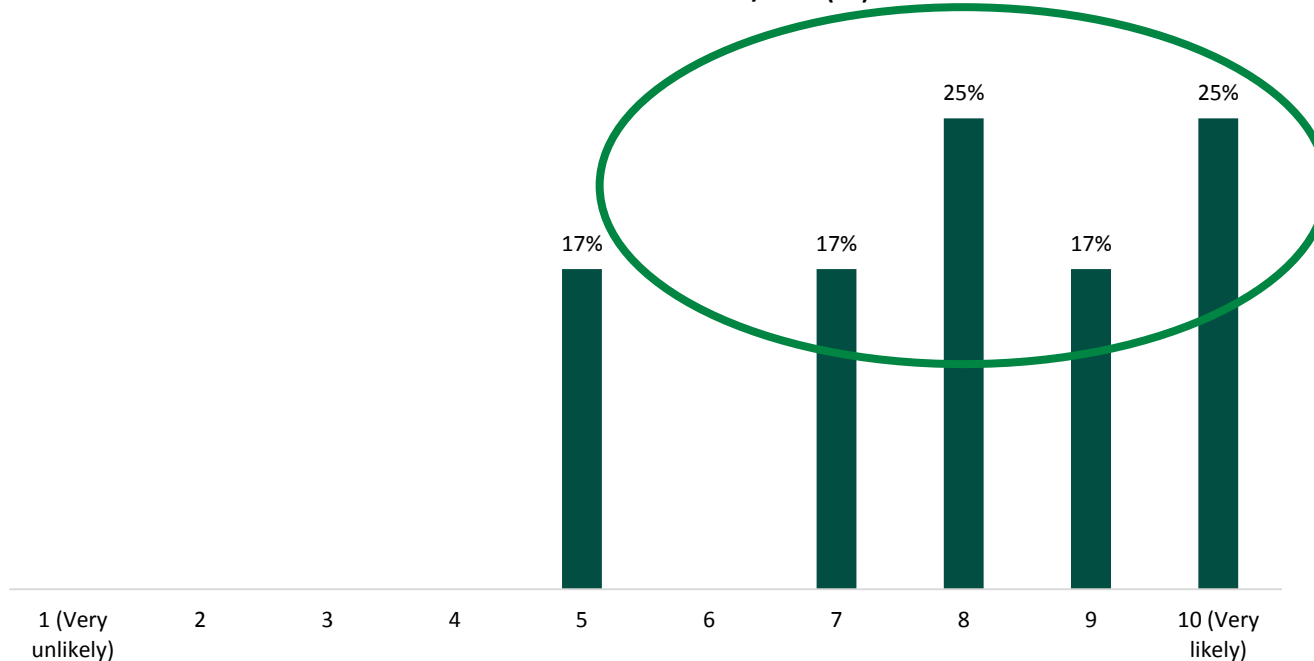
"I would definitely have it in the back of my mind, you know, like how much water I'm using, just subconsciously. And, you know, the incentive of having lower bills is just such a great incentive"

Impact on behaviour



Overall, **84%** of respondents stated that they would be **more conscious of the amount of water they use** in their home as a result of using this tool. Please note the very low sample size.

How likely would you be to be more conscious over the amount of water you use at home as a result of this information/tool? (12)



Impact on behaviour



Being able to compare to similar households as well as seeing usage in a variety of metrics would help customers to save water

The use of a variety of metrics allows users to understand and visualise their water usage

For others, their behaviour would only be changed if they were making significant savings through the use of this tool

Respondents would typically recommend this tool if they were benefiting from using it

"If I was benefiting from using it myself, I would definitely recommend it"

"I am generally careful anyway, but I think if I saw I was well out of synch with other people I could say what am I doing differently to them? So, there might be savings to be there"



"I do think it will make me more conscious of how much I use. The graphs were really good. Yeah, I can't see myself obsessing over it. But yeah, it's, it'd be good to go when you get your bill"

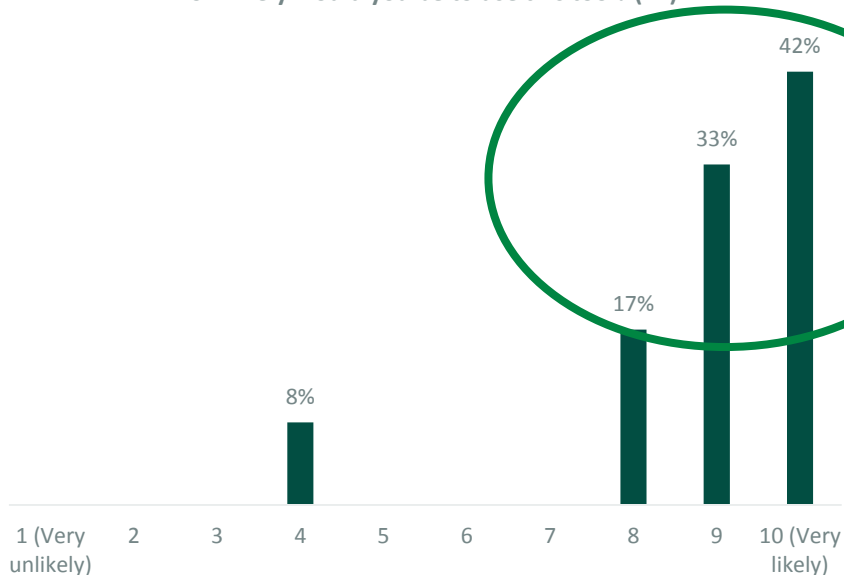
"I think it depends on how significant the savings could be, because if I had to make a massive effort and at the end of the month it said 10p it would be not worth it"

Impact on behaviour



- Overall, the **majority of respondents stated that they would use this water saving tool**. One respondent provided an answer of 4, however when asked why this was solely based on the lack of personalisation currently available within the tool. Please note the very small sample size.
- As well as this, some respondents would tend to **use this tool more often at first**, and less frequently as they become more familiar with the tool, while others stated that they would use the app more often due to its greater convenience.

How likely would you be to use this tool? (12)



"I think I would use it more at first, until you started to get the feel for it and then when you sort of got to this stage where you got to know what to expect, it would reduce"

"Coming back to the mobile app, I think you could just have a quick look whenever you wanted to... you have a spare five minutes, oh I'll just check how my water usage is"

Phase two key findings



- Customers recognised and appreciated the extent to which their feedback in phase one had contributed towards the proof of concept shown in stage two – demonstrating the positive impact of co-creation with customers.
- Overall, all respondents **found the tool useful with most stating that it would change their behaviour** by making a more conscious effort to save water. The tool could therefore be a key driver of positive behaviour change in customers.
- The ability to **compare with similar households** as well as **choose different metrics** allowed respondents to understand and visualise their water usage in greater detail.
- The majority of users would prefer their **usage to be displayed in terms of pounds** rather than bottles. This was seen as more relevant to customers. Similarly to this, while respondents liked the ability to set a water usage target they would find it **more useful if this was also displayed in pounds/savings**.



Phase two key findings



- Respondents also found the **ability to personalise the tool a useful feature**. Key areas where further personalisation of the tool would be beneficial included:

Set quarterly or yearly comparisons

Offer flexible targets which can vary across months

Ability to select appliances relevant to each user

- The colours of background and text were highlighted as an issue across both groups. **Ensure bold colours and large text sizes are used so text is clearly visible against background colours.**
- While respondents were initially in favour of the idea, awarding incentives for meeting a savings target was not preferred by respondents across both groups and so is not a necessity to encourage water saving behaviours.

Section three

Supporting survey

Survey to all members of In the Flow with the aim to capture the unmetered point of view...

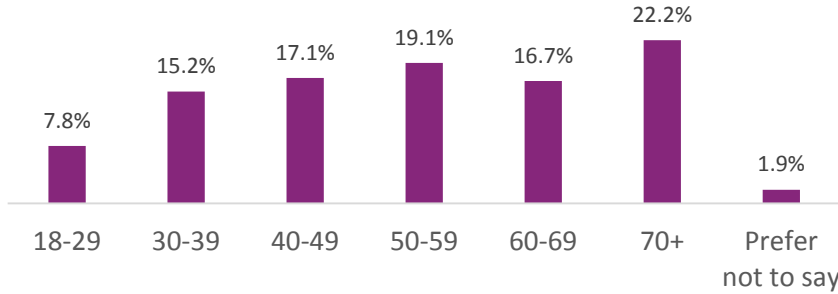


Who did we speak to?

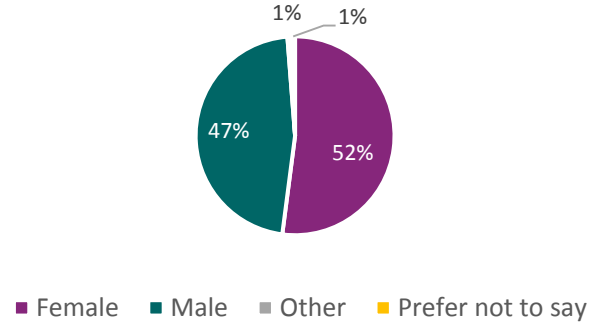


Below shows the demographic breakdown of respondents who took part in the survey. Percentages are rounded so may not always total 100%

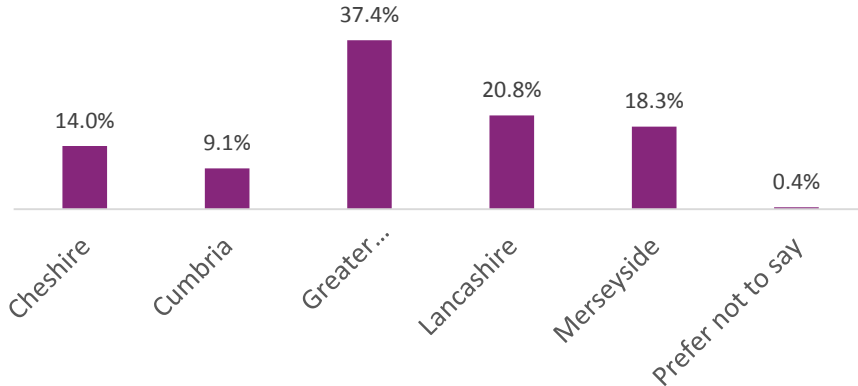
Age (486)



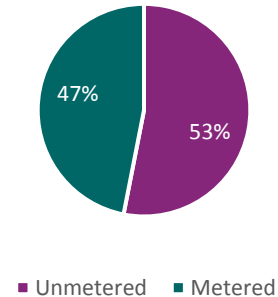
Gender (486)



Region (486)



Metering status (486)



Water Visualisation tool: welcome page



253 Likes

The main areas that respondents liked on the first page of the tool were the overviews on the right hand side of the page showing average usage and comparison data. Respondents liked the way this information was presented.

"A picture tells a thousand words. I like visual tools like this. It shows clearly what user has done over the period"

"Like it showing whether usage against last year is up or down"

"Very clear information, like that you can compare usage immediately"



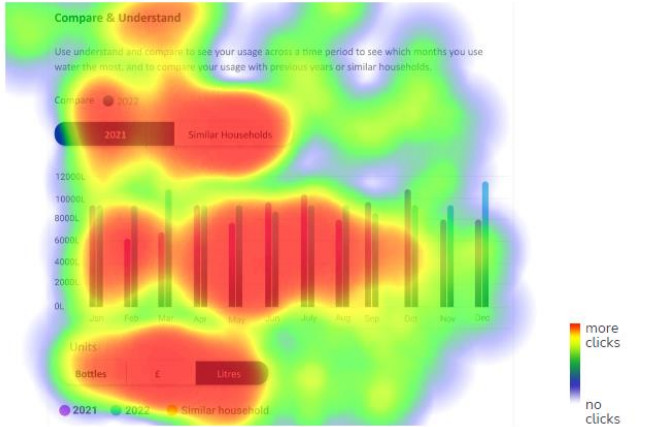
83 Dislikes

The areas with the highest concentration of dislikes on the first page were the compare, usage and appliance boxes, though less concentrated than the likes.

"Well done!" has a very patronising feel"

"If you reach your limit, does that mean you won't get any more water to use that week/month?"

Water Visualisation tool: compare and understand

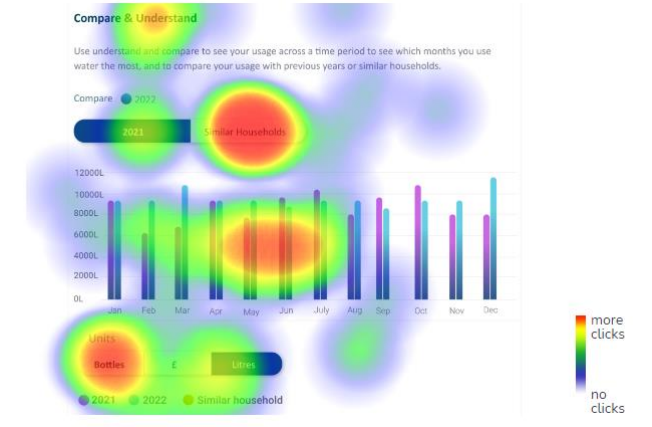


180 Likes

As shown the most liked aspects of the second page were the graph, the units of measurement and the ability to compare against previous years and similar households.

"I like how it is laid out, very clearly so you can understand and compare to past year and other households"

"Being able to compare with last year is very useful"



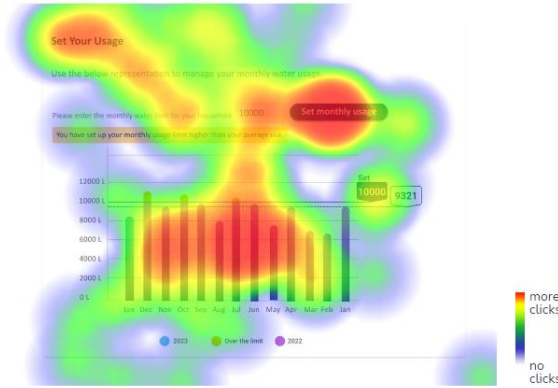
86 Dislikes

On the second page, aspects which received likes also received dislikes from respondents, particularly the similar households feature and the graph which some felt wasn't immediately clear to read.

"Graph isn't immediate easy to read and whilst I understand it I don't have time to take in the information presented in this way"

"Litres is ok but bottles??? Large ones? Small ones? Pint bottles?"

Water Visualisation tool: setting a goal

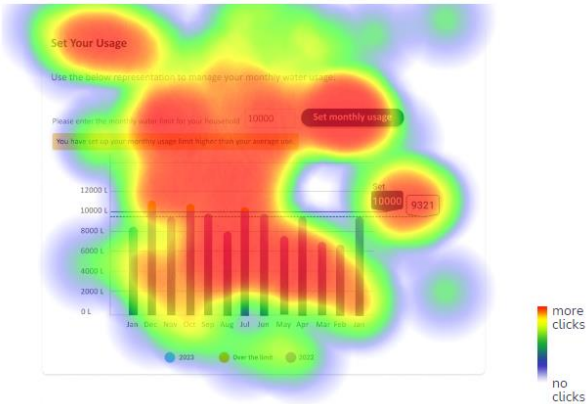


93 Likes

This page received the fewest number of likes from the heatmapping tool, receiving only 93 likes in total. Respondents liked the 'set monthly usage' tool and liked the use of bar charts.

"Puts the choice in the hands of the customer as to how much usage they want"

"Again useful information we need to know these things and it is easy to understand"



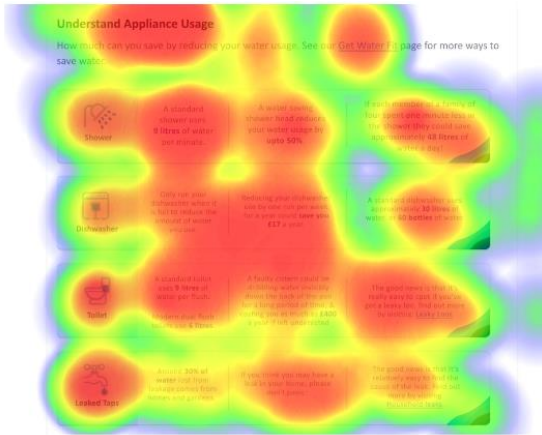
138 Dislikes

This page received more dislikes than likes, with 138 in total. Generally, respondents felt that the graph needed more clarity, for example around what would happen if their target was not met.

"Usage fluctuations for the year vary so much that a general goal isn't that helpful"

"Again, not clear as to what happens if we use above average for one month or so? If someone falls ill and requires laundry doing several times a day, would we be penalised?"

Water Visualisation tool: understand usage



215 Likes

Most respondents liked the tips displayed and felt that they were informative and useful.

"This section is very informative and helps you understand what each item uses"

"These kind of little tips are really useful to help me understand how much i use by doing every day activities"



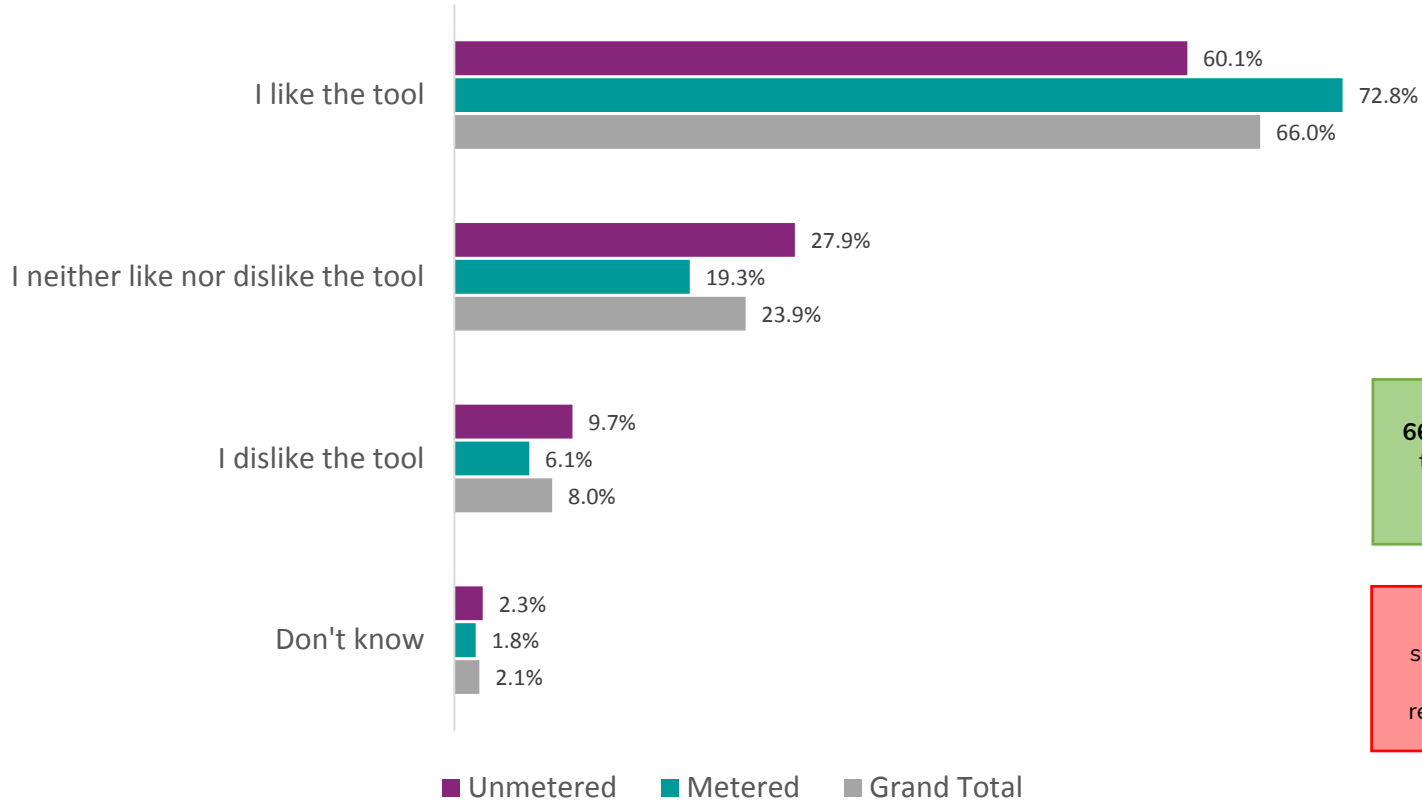
66 Dislikes

Some felt that tweaks should be made to the information presented – e.g., references to bottles of water. Some felt that this was too much information on one screen.

"Rather than 60 bottles of water, a better comparison would be the equivalent water to wash by hand in a washing up bowl"

"A lot of information on one screen, particularly if user is viewing on a phone or tablet"

How do you feel about the tool?



66% of respondents overall liked the tool - **72% of metered** and **60% of unmetered**.

8% of respondents overall suggested that they **disliked the tool** - **9% of unmetered** respondents and **6% of metered**.

Please note, for the graphs included in this section, 10 respondents answered 'don't know' to whether they had a water meter, which is why the metered and unmetered totals will not total 486. this respondent's answers are still included within the 'overall' score.

Why do you feel that way?



Respondents were asked why they liked, disliked or weren't sure about the tool.

The tool would help cut down water usage.

"I think it helps people understand how they use water and may in certain circumstances help them reduce"

The information provided was easy to use and understand.

"it is easy to understand and follow. With good tips on how to save money and to monitor usage"

Repercussions about exceeding water usage targets caused concern.

"It is not clear what will happen if your water usage goes over the set amount"

Bottles as a measurement was seen as an unacceptable way to track usage.

"So your bottles are 5ltr . I would suggest you do away with bottle units unless your have stated at the start what size they are"

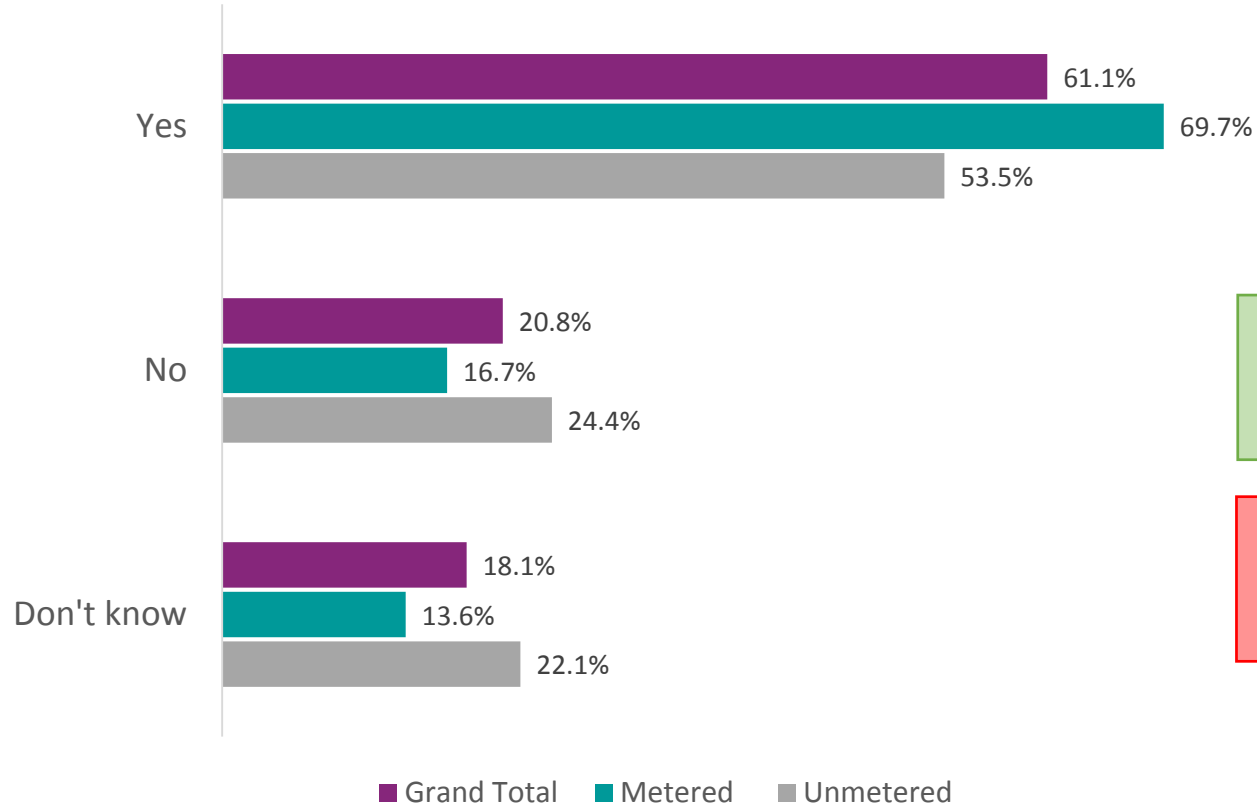
Reservations about water meters.

"It's irrelevant to me. I have zero intention of getting a meter"

More accuracy is needed on the figures and how they would be calculated.

"How accurate is it. Provide a bit more technical information - not everybody is dumbed down these days!"

Would you use this tool?



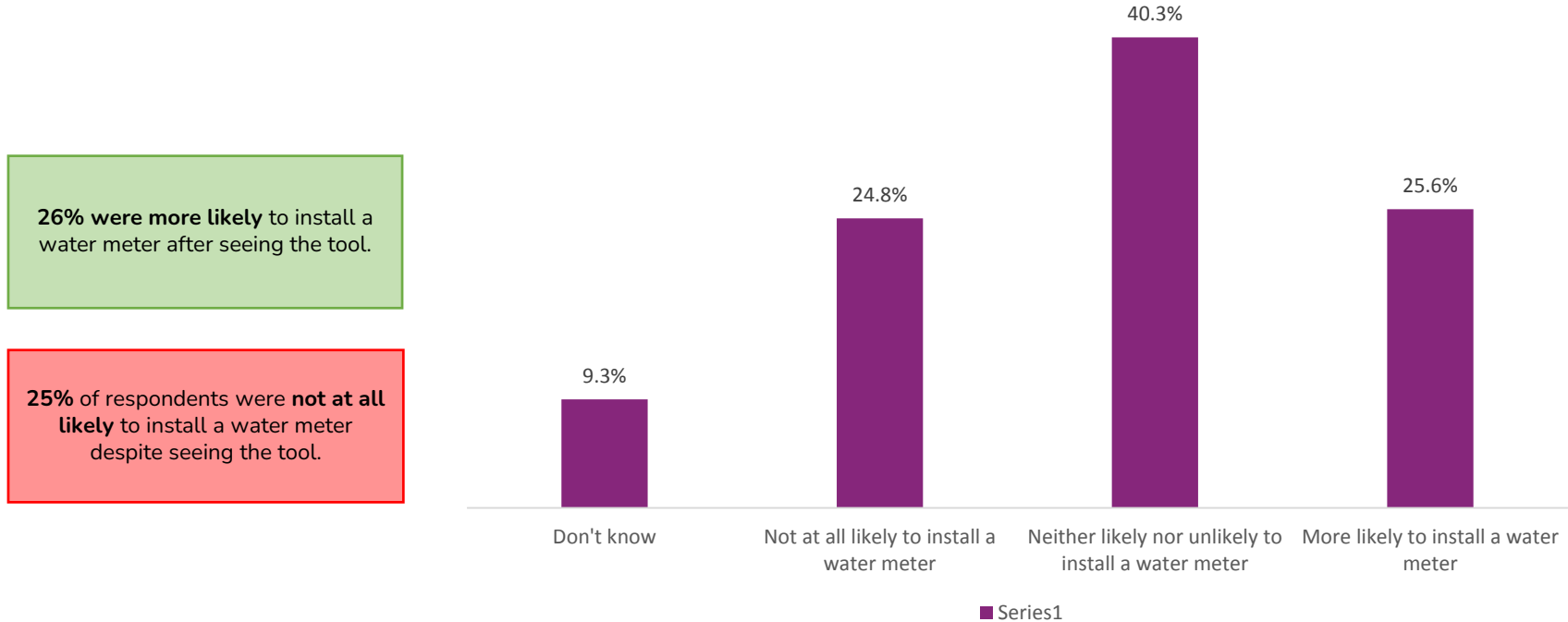
61% of respondents overall would use the tool – **70% metered and 54% unmetered.**

21% of respondents overall would not use the tool – more common amongst unmetered (**25%**) than metered (**17%**).

Access to a product like this would make me...



This question was only asked to respondents who were **not** on a water meter (258 respondents).



Phase 3 key findings



- Overall, **most respondents liked the tool** – some suggested areas for improvement included: ensuring graphs are made as simple as possible, replacing the ‘bottles’ metric, including clarity around what would happen if targets weren’t met and considering how to present water saving tips so there wasn’t too much information on one page.
- 66% liked the tool – higher amongst metered (72%) than unmetered (54%).
- 61% would use the tool – higher amongst metered (70%) than unmetered (47%).
- **26% of unmetered customers said that access to the tool would make them more likely to install a water meter.** With 40% unsure, stating they are *‘neither likely nor unlikely to install a water meter’*.